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SONIC 3D

JON BURTON DISCUSSES HIS ISOMETRIC PLATFORMER AND ITS 2017 UPDATE

THE HISTORY OF REALSPORTS

HOW ATARI INC CONVERTED POPULAR SPORTS TO ITS 8-BIT HOME SYSTEMS

8Bitdo® GAMEPAD OFFER

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TETRIS

ALEXEY PAJITNOV AND **HENK ROGERS** REVEAL HOW THEIR ICONIC PUZZLE SERIES CONQUERED THE WORLD

THE LAST BLADE

HOW JAPANESE FOLKLORE SHAPED SNK'S SAMURAI SHODOWN SUCCESSOR

THE MAKING OF TOTAL ANNIHILATION

CHRIS TAYLOR GOES BEHIND THE SCENES OF HIS REVOLUTIONARY RTS MASTERPIECE

PLUS

ALAIN FERNANDES
I HAVE NO MOUTH AND I MUST SCREAM
STARDEW VALLEY
3D MONSTER MAZE
ATARI JAGUAR
STARDUST
SHINOBI
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THE RETROBATES

FAVOURITE VERSION/ SPIN-OFF OF TETRIS

DARRAN JONES

It's got to be *Tetris DS*. Lots of different game modes fused to classic Nintendo characters. I still play it today.

Expertise:
Juggling a gorgeous wife, two beautiful girls and an award-winning magazine

Currently playing:
Project Zero II: Crimson Butterfly - Director's Cut

Favourite game of all time:
Strider

DREW SLEEP

I used to think that *Puyo Puyo Tetris* was *Tetris*' final form, then I saw the trailer for *Tetris Effect* and I'm no longer sure. We'll have to wait and see!

Expertise:
Expunging the word 'playable' from the style guide

Currently playing:
Final Fantasy XII: The Zodiac Age

Favourite game of all time:
Final Fantasy VIII

NICK THORPE

Puyo Puyo Tetris, because other Tetris games don't feature a bizarre dog scientist named after a *Tetris* block.

Expertise:
Owning five Master Systems (I sold two)

Currently playing:
Hanagumi Taisen Columns

Favourite game of all time:
Sonic The Hedgehog

SAM RIBBITS

I've really enjoyed playing *Puyo Puyo Tetris*, even against Nick – our very own *Tetris* wizard. It's so… *playable*. *Tetris DX* is pretty *playable*, too. I guess *Tetris* is just such a *playable* game.

Expertise:
Trolling the team

Currently playing:
Hollow Knight

Favourite game of all time:
Croc: Legend Of The Gobbos

GRAEME MASON

The original Game Boy is the version I fell in love with, back when gaming on the move seemed like a remarkable thing.

Expertise:
Adjusting the tape azimuth with a screwdriver

Currently playing:
Fallout 3

Favourite game of all time:
Resident Evil 4

ANDREW FISHER

Super Bombliss on SNES adds bombs to the pieces and has interesting new modes.

Expertise:
Over thirty years of gaming, from Commodore 64 to Wii U

Currently playing:
The beta version of Puzzle Bobble (C64)

Favourite game of all time:
Paradroid

JASON KELK

I've sunk hours into the Game Boy version, but *Vioris* on the C64 comes a close second.

Expertise:
Being a homebrew hero

Currently playing:
Planet Search (C16)

Favourite game of all time:
Io

PAUL DRURY

I like the challenge of the arcade version, which gets tough very quickly, and my eldest daughter enjoys schooling me on *Tricky Towers*, our update of choice.

Expertise:
Scaramouche

Currently playing:
Detroit: Become Human

Favourite game of all time:
Sheep in Space

LOADING...

I can still clearly remember my first experience of *Tetris*. I was in Densham Computers as I had a bit of pocket money to spend and I was looking for my next purchase. I remember browsing through a meagre selection of Amstrad games and trying to choose between the latest Codemasters releases, when I saw a group gathered around one of the computers.

I wasn't prepared for the sight that greeted me as the game looked so basic. Different coloured blocks were falling downwards, only to be rotated and moved around by the person playing. It looked dull, and yet I could stop watching the deluge of shapes fall downwards. I was mesmerised.

A lack of money at the time meant that my first dalliance with *Tetris* was brief, but we became reacquainted when I acquired a Game Boy in the early Nineties and fell in love with Bullet-Proof Software's version of the game. I've been a fan ever since and it's satisfying to finally share that love with you across our two fantastic cover designs.

If you're not a fan of *Tetris*, then you'll find plenty to get you in a spin this issue, including articles on Atari's *RealSports* series, the making of 8-bit loading screens and the groundbreaking *Total Annihilation*.

And do make sure you check out our amazing subs offer on page 30. It's proving very popular and is even open to current subscribers.

Enjoy the magazine!

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The Making Of: I Have No Mouth And I Must Scream

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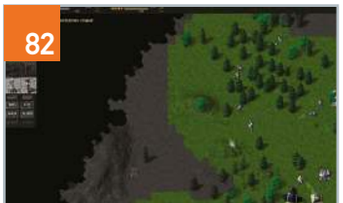
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REMEMBERING TED DABNEY

Retro Gamer pays tribute to the cofounder of Atari Inc

On 26 May, Samuel F Dabney (known to many as Ted) sadly passed away from esophageal cancer at the age of 81. In addition to helping to create *Computer Space* and *Pong*, Ted was also responsible for the cofounding of Atari Inc, one of the biggest players in the early days of the videogame industry.

Due to his quiet nature and lack of interest in being in the spotlight, many gamers have been unaware of Ted's contributions to videogames, with most having no idea how big his involvement was until Leonard Herman chronicled his achievements in a 2009 *Edge* article.

After leaving the US Marines, Ted worked in the Bank Of America's research lab, but was unsatisfied with his work there so left to join Hewlett Packard. After a stint there he changed jobs again to be an engineer at Ampex. He eventually met Nolan Bushnell and history was made.

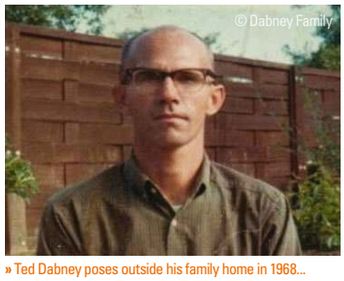
So why did it take us so long to learn about Ted's role at Atari? "Nolan Bushnell was a showman," explains Leonard, whose 1994 book, *Phoenix: The Rise & Fall Of Home Videogames* was one of the first to mention Ted's key involvement. "[Nolan] worked on a carnival midway during college. Ted was an engineer. Nolan was a people person, so he was the person in front of the cameras, while Ted stayed in the background. When Nolan began publicising himself more than the company, that was when Ted decided to leave."

It would appear that the structure at Atari was much like Apple, a company that Atari would battle against throughout the late Seventies and early Eighties as both companies put out their own home computers. "Ted wasn't really involved with the games themselves," continues Leonard. "Ted was the technical guy, the Steve Wozniak, whereas Nolan was Steve Jobs. Nolan came up with the ideas and Ted figured out how to put them together. Initially they tried to get a contract with Bally; Ted would design pinball machines and Nolan would do the videogames. When that didn't pan out and they went into business on their own, Ted secured financing after Wells Fargo denied Nolan a loan. When they began building *Pong* machines, Ted purchased the television sets. And it was Ted who came up with a retail price of $937 for each one after seeing a car with that number on its licence plate."

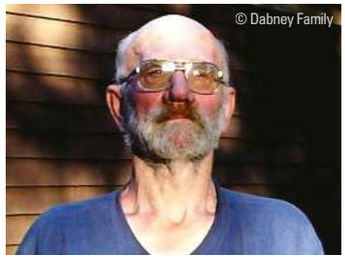
Although Atari Inc is the most well-known company that Ted and Nolan were involved with, it certainly wasn't the first, as Leonard explains. "After they signed a deal with Nutting Associates to build and distribute *Computer Space*, Ted and Nolan needed a way to distinguish the stuff they made for themselves with the stuff that Nutting had the rights to. So they started Syzygy Game Company. Another engineer at Ampex, Larry Bryan, actually came up with the name Syzygy, which loosely means 'the alignment of three celestial objects'. In order to keep Nutting from claiming that they owned *Computer Space*, a tag that stated 'Syzygy Engineered' was put on the front of every *Computer Space* cabinet."

With Leonard having documented Ted's previously unknown involvement

» Ted (left) with Nolan Bushnell, (centre) and Al Alcorn (far right) proudly show off *Pong*.



» Ted Dabney poses outside his family home in 1968...



» ...and 40 years on, Ted recreates the famous image that introduced him to so many gamers.

TED DABNEY TIMELINE

1961 Ted joins Ampex and works in its military products section, he eventually gets involved with various video imagery products there.

1969 Nolan Bushnell joins Ampex and he becomes friends with Ted. After seeing a computer system at Stanford Artificial Intelligence Laboratory the pair discuss creating a similar system that people could pay to play.

1971 Ted and Nolan leave Ampex and create their own company called Syzygy. In the same year they release *Computer Space*, which is based on the 1962 game, *Spacewar!*

1972 Ted and Nolan form Atari Inc after they wanted to incorporate and discover another company had the Syzygy name. The name is derived from a term in the popular Chinese game, *Go*, which they were both fans of.

» One of the first projects Ted was involved with while working with Nolan was the creation of *Computer Space*.

> **"Every time I spoke to Ted, he was always funny, cheerful and optimistic"**
> Leonard Herman

with Atari for so long we were keen to know what Ted was like as a person. "The funny, and sad thing about our friendship is that we never met in person," Leonard reveals. "We always communicated by Skype, email, and phone. I had a standing offer to visit him in California but I never made good on it. Every time I spoke to Ted, he was always funny, cheerful and optimistic. This was even after his house burned to the ground from a wildfire in 2016 and after he was diagnosed with an aggressive form of cancer. He told me several times that he had a wonderful life and he had no regrets. We've had several talks about his upcoming death and we both agreed that death was part of life. He wasn't depressed about it at all. And no matter how bad he felt he always managed to make me feel good. He'd always tell me that my call made him feel better."

It's clear that Ted was an important part of Atari's success, even if so many gamers were unaware of it as the time. Perhaps one of the sweetest aspects is that it wasn't until late in his life that he realised just how important his work was and the impact he had on people.

"Ralph Baer is credited as the inventor of the home videogame. Nolan Bushnell is credited as the father of the videogame industry. I think Ted is somewhere in the middle," concludes Leonard. "If you were able to ask Ted what he thought his legacy was, that answer would have changed in the last few months. Before March, he would have been humble and say he didn't do anything. However, after a Smithsonian seven-man crew recorded him for nine hours, he called me in amazement. He was simply amazed that people cared enough about him to do this. For the first time, he began to realise the impact he made on so many peoples' lives. He was so happy. I think that's his legacy. He's the cocreator of an industry that made millions of people happy."

Our thoughts go out to Ted's friends and family. *

» Few things scream 'retro' like a *Computer Space* cabinet.

1972 *Pong* is released and becomes a huge hit. As with *Computer Space*, Ted Dabney created the basic video circuitry principles that Allan Alcorn used to create the game. The game would go on to become iconic.

1973 After feeling increasingly overshadowed by Nolan Bushnell and being left out of high-level meetings, Ted Dabney leaves Atari Inc, selling his stake in the company for $250,000.

» [Switch] Ubisoft's *Starlink* has shades of *Star Fox* to it and also includes Fox McCloud on the Switch version.

» [Switch] *Super Mario Party* has some great-looking games and does clever things with multiple Switch systems.

» [PS4] Capcom's *Resi 2* remaster looks stunning. We can't wait to retread the corridors of Racoon City's police station.

RETRO REVOLUTION

CLASSIC FRANCHISES BOLSTERED BY THIS YEAR'S E3

There were plenty of big surprises at this year's E3, but one of the highlights was arguably the reveal of Capcom's remake of *Resident Evil 2*. First announced in 2015, Capcom not only unleashed an excellent looking trailer for its new game, but also revealed it would be ready for release in January 2019, which makes us tremendously excited for next year.

Interestingly, while the remake uses Capcom's RE Engine (the same engine that powers *Resident Evil 7*) it utilises a third-person viewpoint like the 1998 original and adopts the same over-the-shoulder style that was popularised in *Resident Evil 4*. It's otherwise been significantly overhauled, as you'd expect. It's unclear how different the game will be story-wise from the PlayStation original, but we've already noticed new enemy locations, meaning there should still be plenty of surprises for veterans of the original survival horror.

» [Switch] Here's hoping the new version of *Hyper Sports* will feature classic Konami characters in it.

While Bethesda didn't have any remakes on display, it did show off the latest instalment of *Fallout*, announced new *Wolfenstein* and *Doom* titles and teased the next *Elder Scrolls* game. *Fallout 76,* due out 14 November, is set before the other games in the series and is online-only. While there will be a focus on multiplayer, you can still play solo if you so desire. *Doom Eternal* takes place after the events of 2016's *Doom* and looks to be just as manic and gory as id Software's impressive reboot, while *Wolfenstein Newblood* is a co-op title set in the Eighties and stars BJ Blazkowicz's twin daughters.

Sega was showing off *Sonic Team Racing* at the event, which is bound to appeal to fans of the blue blur, and was also promising plenty of PC adaptations, including its *Yakuza* games and its HD updates of *Shenmue* and *Shenmue II*. Interestingly, there was little news from Yu Suzuki and *Shenmue III,* making fans concerned about it launching in 2019.

Perhaps unsurprisingly, Nintendo had one of the strongest retro-themed lineups with the vast majority of its E3 show being devoted to *Super Smash Bros Ultimate*. Every single character from the 19-year-old franchise will be present and correct, which makes us eager to play it, but also concerned about potential balancing issues. New characters were also announced, too, including Princess Daisy, Inklings and *Metroid*'s Space Pirate boss, Ridley.

More highlights from Nintendo included further insight into its new *Fire Emblem* game, which will be released in early 2019, a fun looking addition to the *Mario Party* franchise and additional news on *Pokémon Let's Go Pikachu & Eevee*. Interestingly, there was no news on the *Star Fox* racing game that's rumoured to be in development and absolutely nothing on the upcoming *Metroid 4* and *Yoshi*.

Other highlights from this year's E3 included a supercharged version of *Tetris* (in VR no less) by *Rez* creator, Tetsuya Mizuguchi, Capcom's announcement of *Devil May Cry 5* (which, like *DMC4*, appears to focus on Nero rather than series hero Dante) news on *Dead Or Alive 6* and *Soulcalibur VI*, *Halo Infinite* and the revelation that a new *Hyper Sports* game would be heading to the Switch courtesy of Konami.

» [PS4] *Metal Wolf Chaos* is a highlight of the Xbox library, and it's great to see it reaching a wider audience.

By far the best news of the event (at least for Darran) is that FromSoftware's acclaimed mech shooter *Metal Wolf Chaos* is being giving a high definition makeover by General Arcade and will be published by Devolver Digital. Originally released in Japan as an exclusive for Microsoft's Xbox it's become a cult classic in recent years and now sells for over £100. Needless to say, Devolver's HD update of the game will be significantly cheaper. ✱

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Take a trip back to the Fantasy Zone with the latest vinyl from Data Discs. In addition to including all the tracks from the classic arcade game, there's also a superb remix of *Space Harrier*'s main theme by the SST Band, as well as brand-new insightful liner notes from Space Harrier's musician, Hiroshi 'Hiro' Kawaguchi. Pressed on 180g vinyl, *Space Harrier* is available in a translucent dark green or black finish. An essential purchase for all Sega fans.

Price: £19.99 **From:** data-discs.com

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SEE PAGE 30 FOR OUR EXCLUSIVE 8Bitdo GAMEPAD OFFER

PICK OF THE MONTH

N30 Pro Bluetooth Gamepad

This cool pad from 8BitDo is a mashup of designs that pays tribute to the NES, SNES and PlayStation. Thanks to its use of Bluetooth it's compatible with a number of different devices, including PC, Mac, Steam, Android and Switch, as well as Raspberry Pi, making it a versatile piece of gaming kit.

It comes with a Micro-USB cable and a single charge will allow you to game for up to 18 hours. While the lack of iOS support is something of a disappointment, the N30 Pro is otherwise an extremely solid controller that should serve you for many of your gaming needs, regardless of whether they're for modern games or classic ones.

Price: £34.99 **From:** funstockretro.co.uk

Hyperkin Duke Controller

There are some gamers that swear by Microsoft's original Xbox controller. If you're one of those people, then you'll be delighted to discover that Hyperkin has officially licensed it and made it compatible with both the Xbox One and Windows 10 PCs. The flashy LED display that shows the original Xbox's boot-up screen isn't really needed and the additional bumper buttons feel shoehorned onto the classic design, but this is otherwise a pleasing replication of the classic pad. Providing, of course, that your hands are big enough…

Price: £69.99
From: funstockretro.co.uk

The Ultimate 90s Collection

It's easy to forget just how big a deal the Nineties were from an entertainment perspective. The decade introduced gamers to the SNES and PlayStation, taught us the joys of Britpop, hip hop and grunge and delivered some of the biggest blockbusters of all time, including *Jurassic Park*, *Titanic* and *The Matrix*. We've recorded all of the above, as well as all the best TV, toys and games from the era in our fantastic new book.

Price: £9.99
From: bit.ly/ultimate90smag

Space Invaders Cabinet Arcade Art T-Shirt

While the classic *Space Invaders* enemy sprite is synonymous with videogames, we've also been rather partial to the awesome original artwork that adorned the side of each arcade cabinet. Thanks to Numskull, you can now proudly show off that stylistic art with this unisex T-shirt, which caters for six different sizes, from XS to 2XL and features a distinctive distressed style.

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From: numskull.co.uk

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Here's my bio... Paul Rose
Paul Rose is probably better known as Mr Biffo – the creator and chief writer of legendary teletext games magazine *Digitiser*. These days, he mostly writes for kids TV, but can still be found rambling on about games, old and new, for his daily website, Digitiser2000.com.

A new perspective

I have got a confession to make: I used to enjoy sexist videogames. I mean, not exclusively… just in that games were less progressive than they are now, and if you played games during the Eighties and Nineties, chances are you played games that would no longer have the same attitudes, were they made today.

We're living in woke times, and many of us who grew up in a less-enlightened era are catching up. It has all happened so quickly that there's a sort of wearily inevitable resistance from certain people.

And for the record, I'm all for it. I feel like I've had my eyes opened, and I want us to live in a world where everyone is treated equally – with the same level of respect. Unfortunately, that does leave me feeling a bit funny towards some of the games I grew up playing.

Take, for example, the *Leisure Suit Larry* franchise. While you could argue that the butt of the joke was Larry himself – a desperate, under-sexed, wannabe lothario – you're going to struggle to make the case that these fairly basic point-and-click adventures were anything other than a weak, pun-laden, excuse for titillation. In today's world, most of the female characters Larry meets would be accusing him of sexual harassment.

Women were used as objects to be pursued – the ultimate reward for solving the adventure's puzzles. Admittedly, going back to them now… they're more tame than I recall (certainly compared to other games from the era – such as *Cobra Mission*, an RPG/adventure which used the same control system for its combat as its numerous sex scenes). Larry's series grew lewder and more overtly sexist as time wore on, but its attitude towards women continues to bother me today.

Though there are whispers of a new *Leisure Suit Larry* game on the way, I can't see it being in step with the times we live in. Furthermore, I doubt it will do much to dispel the tickling guilt I have that I did indeed play – and, what's more, enjoyed – Al Lowe's games.

I'm sure some of you will think "Just get over it, Biffo… what does it matter? You're overthinking it." But here's where I get stuck: there's something in me which doesn't want to let go of my enjoyment of the games I played. For better or worse, they – and others which dabbled with sexist content or imagery (step forward Duke *Nukem Forever*, rescue-the-princess platformers and – through their exclusion of strong, female, characters – pretty much any other game, barring the overtly sexualised *Tomb Raider*) – were an enjoyable part of my life. You know: just like *Carry On* films and *Benny Hill* were.

I guess I struggle to reconcile where I'm at now with where I might've been in the relatively recent past. I'm proud that I've been able to flow with the times, and I understand that most of us mature, and grow, and that we all did things when we were younger that we might not be terribly proud of.

And maybe the important thing is that I'm aware of the disparity between me then and me now. Maybe I'll make peace with that. *

Do you agree with Paul's thoughts? Contact us at:

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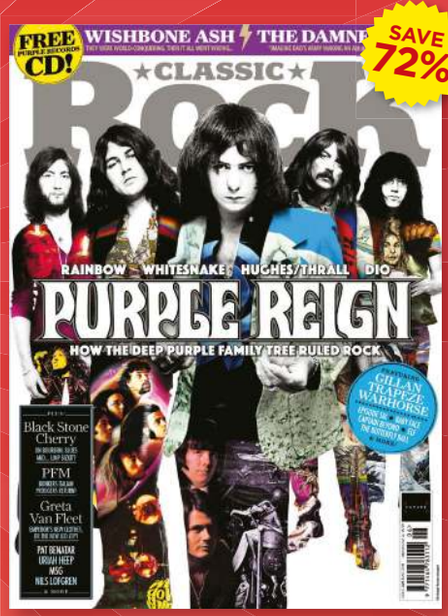

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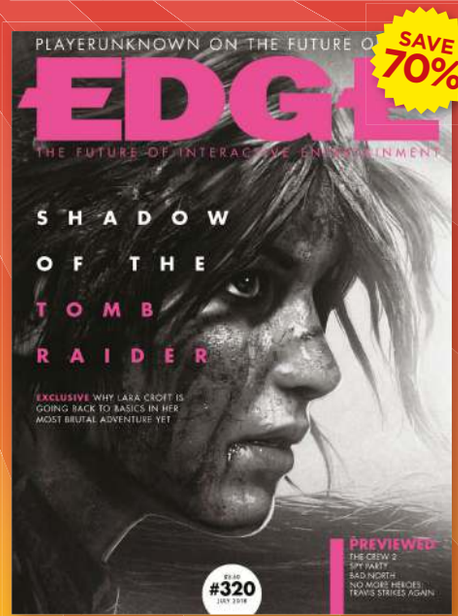

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Intellivision returns

The industry veteran, Tommy Tallarico, talks to us about the return of a classic console

The Mattel Intellivision was a groundbreaking console that often doesn't get the recognition it deserves. Tommy Tallarico and the newly formed Intellivision Entertainment want to change that perception, and at the same time bring a whole new piece of kit to the market.

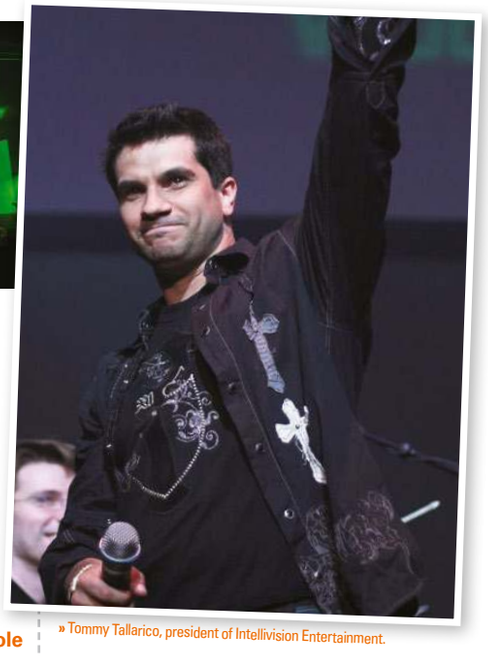
How did the idea for a new Intellivision console come about?
I was a good friend of Keith Robinson, and he approached me a couple of years ago about doing something together as he knew my love for the system. Unfortunately, though, he sadly passed away before we could get into serious discussions, but I knew Steve [Ronay, chairman] and Emily [Reichbach Rosenthal, head of licensing], and our biggest passion was to keep the [Intellivision] brand and name alive, and be able to present it to a new generation.

How did you become an Intellivision fan?
The Intellivision's sports games were what sold it to me and my dad, as we were big baseball fans. My mum used to play skiing and bowling, and it was a family experience, we were all on the same level, with easy and simple to understand games.

There are a few similar devices around today – what will mark the new Intellivision out and why the Mattel console in particular?
We want to bring back that fun, family feeling to gaming, which doesn't necessarily mean children's games, but something that parents will want to buy for their family. And we have complete control on the system, as we want people to know it's only associated with quality. People under 30 may not have heard of the Intellivision, and it was actually pretty cutting edge for the time. I mean, downloadable games through cable? We want to pay homage to that, its history, the new games, and bring it up to date by upping the graphics and sound.

Which games will be included?
We already own 80 of the original games, and they are up and running on the system, remapped to the new controller. We are talking to some of the licence [holders for games] such as *Tron Deadly Discs* and *Burger Time*, and hopefully they'll want to be part of it. Seven of those original games, the best of each genre, will be redone, with better graphics, sound and more levels.

» Tommy's videogame music extravaganzas, Video Games Live, will be unaffected and returns to Europe, including the UK, in the autumn.



» Tommy Tallarico, president of Intellivision Entertainment.

Will the controller and the console itself be similar to their original, unique designs?
It'll be in the same world, but brought into the 21st century. The controller will have the disc, because, like a mouse, it's friendly and easy to use. The console will take its cue from the original, but we want multiple options available. One of those will be a retro look; but if a nine-year-old kid wants something that looks completely different, then that option will be available, too. We're not just talking art, but unique designs because of the way we're designing the system. I'm calling it organic hardware.

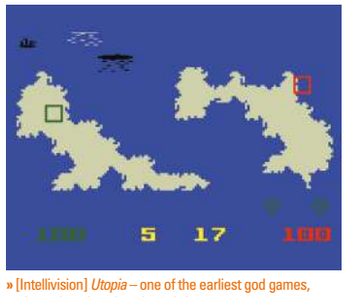
Will you be able to add additional games to your own system?
It's going to be able to Wi-Fi connect to our store, where on day one we aim to have 20-50 games for download, with no cartridges involved. And we'll have leaderboards – imagine putting your best *Astrosmash* score up and seeing where you are in your country, or the world. As gamers, we know it's not about the specs – it's about the games you can play.

> **"We want to bring back that fun, family feeling to gaming"**
> Tommy Tallarico

What's the planned release and how much will it cost?
We're gonna take our time and get it right. We have targets and goals, but it's not something you're going to see this Christmas, or the next. We want it to be special, and affordable. I promise you right now, this system will be way less than 200 bucks. *

To keep up to speed on developments of the new Intellivision, head over to its Facebook page or website: intellivisionentertainment.com.

» [Intellivision] The graphically-impressive *Starstrike* – one of the games due an upgrade? We hope so.
» (Above) Tommy hopes the rivalry between the Intellivision and Atari 2600 can rise again



» [Intellivision] *Utopia* – one of the earliest god games, and one that played out in real-time, too.

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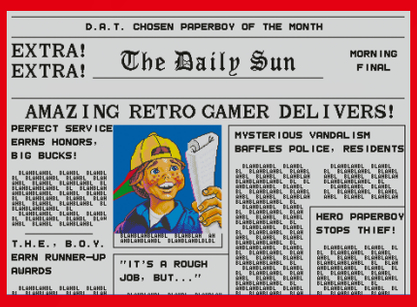
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BACK TO THE NOUGHTIES

JULY 2001 – E3 gives us our first glimpse of the console battle proper, and publishers suddenly remember that they could be selling games in the here and now. Nick Thorpe chronicles a busy summer month…
NT

NEWS JULY 2001

The UK's third ethnic riot of the year began in Bradford on 7 July, following previous events in Oldham and Burnley. Tension between British Asian and white British residents had run high in recent times, and the National Front attempted to hold a demonstration in the city. This was banned, but a subsequent Anti-Nazi League rally was allowed to take place, leading to a confrontation between the two groups that sparked the riot.

Croatian tennis player Goran Ivanišević defeated Patrick Rafter to claim the Wimbledon men's singles championship, becoming the first wildcard entrant to win the tournament. The three-time runner-up was ranked 125th in the world prior to the tournament, but defeated players including Carlos Moyá, Andy Roddick and Tim Henman to reach the finals.

On July 19, author and politician Jeffrey Archer was found guilty of perjury and perverting the course of justice, and sentenced to four years in prison. The charges related to a 1987 libel case brought against the *Daily Star*, which had alleged that Archer had paid Monica Coghlan for sex. Two witnesses stated that Archer had falsified an alibi during that trial. This marked the end of Archer's political career – though he's still a member of the House of Lords, he has voted only once since leaving prison.

[Dreamcast] If this were Shadow instead of Sonic, we wouldn't actually mind the truck winning.

THE LATEST NEWS FROM JULY 2001

So, who 'won' E3 this year? That depends entirely upon who you ask. Sony's show was short on originality but featured plenty of heavy hitters. *Metal Gear Solid 2* predictably took top billing, but it had plenty of backing. First and foremost, Square's RPG epic *Final Fantasy X* was playable at the show. Additionally, *Silent Hill 2*, *Twisted Metal Black*, *Virtua Fighter 4*, *Time Crisis II*, *Grand Theft Auto III* and *WipEout Fusion* were all coming exclusively to the PlayStation 2. The biggest new first-party game on show was *Jak & Daxter*, the new platformer project from *Crash Bandicoot* developers Naughty Dog. Capcom's *Devil May Cry*, demonstrated entertainingly by Shinji Mikami during Sony's keynote presentation, was the best of the new third-party games.

Nintendo showed off some interesting original GameCube games. *Luigi's Mansion* was funny and graphically superb, and while *Pikmin*'s real-time strategy design might not have played well to a conference crowd, any new game with the involvement of Shigeru Miyamoto was worthy of attention. Other key games included the stunning *Star Wars Rogue Squadron II: Rogue Leader*, *Super Smash Bros Melee*, *Wave Race: Blue Storm*, *Star Fox Adventures*, *Eternal Darkness* and *Kameo: Elements Of Power*. However, some hotly anticipated games were barely there – the old *Zelda* tech demo was paraded around once again, *Mario Kart* was announced with little fanfare and *Metroid Prime* was present without proper gameplay. What's more, the major *Mario* game that most attendees expected to see didn't materialise.

Console market newcomer Microsoft did struggle somewhat – not only had it revealed most of its software already, its keynote presentation was fraught with technical glitches. However, *Halo* had lost none of its potency as a potential killer app for the Xbox, and *Dead Or Alive 3* remained the most graphically impressive game on the horizon. Better yet, Microsoft was able to confirm more crucial support from Japanese third-parties – Capcom announced that *Dino Crisis 3* was heading to Microsoft's console exclusively, and Sega confirmed the exclusive releases of *Crazy Taxi Next* and *The House Of The Dead III*, though none of these announcements were backed by gameplay footage.

The three-way console scrap wasn't the only thing going on in gaming. *Edge* was keen to highlight the PC picks of E3, the most exciting being *Max Payne*. The film noir-inspired shooter borrowed "Bullet Time" slowdown from *The Matrix* and was considered

[PC] Knowing *Operation Flashpoint*, every player will approach this checkpoint differently.

THIS MONTH IN...

N64

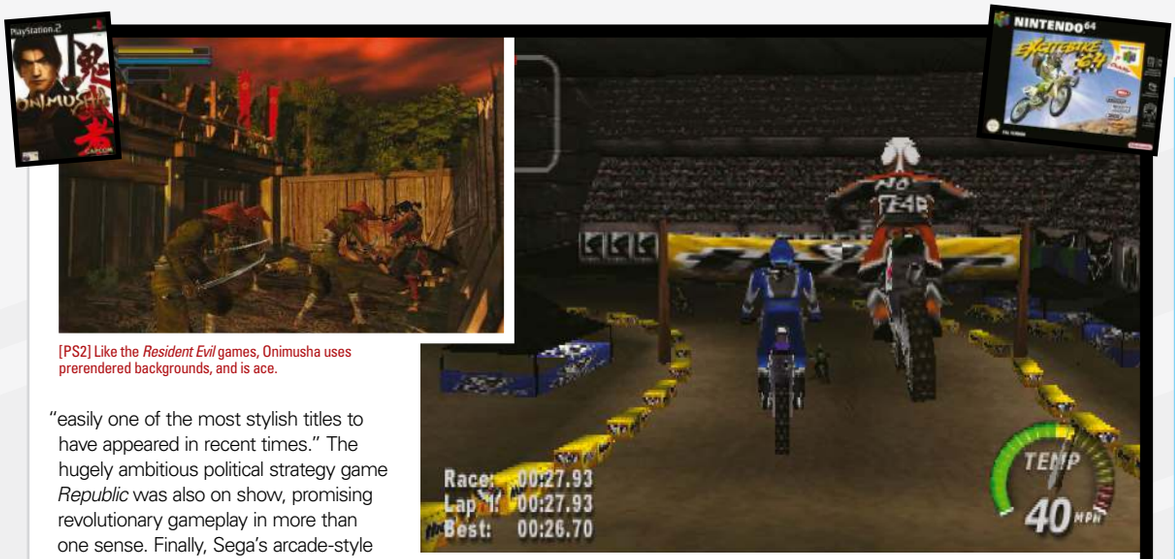
"It makes me go psycho when people think the cartoon came before the game. Like gangsta rap – it wasn't invented by NWA but Ice T," rants reader Dan Filth. The context of the rest of the letter is sadly lost to time, but we can only assume it was about *Pokémon*. There's a lot of audience crossover with Ice T, we hear.

Edge

Edge belatedly notes that Game Network was launched in May, becoming the UK's first dedicated 24-hour videogame TV channel. The station would run for just under five years, during which gaming content slowly diminished in favour of psychic hotlines and adult chat shows, until it was rebranded as Babestation in 2006.

Play

"Come on Konami, accelerated time is akin to premature ejaculation," says reader Rod Dillinger. What's the beef? The inability to play 90-minute matches in the *International Superstar Soccer* games, apparently. That this is letter of the month should tell you all you need to know about this month's mailbag…



[PS2] Like the *Resident Evil* games, Onimusha uses prerendered backgrounds, and is ace.

[N64] *Excitebike 64* is brilliant, although the 14 month wait for a PAL version definitely wasn't.

"easily one of the most stylish titles to have appeared in recent times." The hugely ambitious political strategy game *Republic* was also on show, promising revolutionary gameplay in more than one sense. Finally, Sega's arcade-style flight combat game *Propeller Arena* was singled out as a late Dreamcast game worth looking at, thanks to its promise of online multiplayer with voice chat. "Outrageous manoeuvres can be pulled off with ease, and the entire experience is wrapped up with the kind of accessibility for which AM2 is renowned," wrote *Edge*.

Surprisingly, there was a fair amount to be excited about without looking too far into the future, too. *Sonic Adventure 2* marked both the blue blur's final outing on a Sega console and his tenth birthday. Players were offered the opportunity to control the villainous Shadow, Rouge and Eggman as well as Sonic, Tails and Knuckles, with levels encompassing high-speed platforming, shooting and treasure hunting. *Dreamcast Magazine* gave the game 93%, with reviewer Martin Mathers calling it "a huge step up from the original" with "much more in common with the old-school Mega Drive *Sonic* titles." *Crazy Taxi 2* also arrived, featuring jumping cabs and a New York-inspired city to explore. "The formula remains sharp enough to support minimal alteration," opined *Edge* in an 8/10 review.

PC players were blessed with the tactical shooter *Operation Flashpoint*, which allowed players to join a hypothetical conflict on the side of America, the Soviet Union or an unaffiliated resistance faction. The game drew praise for allowing players enormous freedom of action – *Edge*'s 9/10 review said "It's about choice, every bit as much as the brilliant *Deus Ex*, and it deserves to be as highly regarded." Business simulation *Startopia* also arrived, from the ex-Bullfrog developers at *Mucky Foot*. This Douglas Adams-inspired game got 8/10 from *Edge*, which felt that the game's humour was "delicate and affecting" and that it "doesn't break boundaries, but it does defy expectations of a genre that's conceptually progressed so little since *Sim City*."

PS2 owners also had some good fortune. While Square's heavily hyped beat-'em-up *The Bouncer* (58%, *Play*) failed to deliver the goods, Capcom's action adventure *Onimusha: Warlords* came out of nowhere. *Play*'s reviewer Mike Richardson addressed concerns about yet another survival horror,

[PS2] *Play* worried that the "gritty realism of gangland warfare" in *GTAIII* might not appeal to everyone. Hmm…

noting that it "pumps the classic formula full of some seriously stylish action," awarding it 91%. *Edge* didn't much like first-person shooter *Red Faction*, giving it 5/10, but *Play* loved it – though its 94% review recommended the game to "sickos" and referenced the Columbine massacre.

Rounding things off for the month, *Excitebike 64* (90%, *N64*) kept game-famished N64 fans going for a little longer, *Breath Of Fire IV* (85%, *Play*) gave PlayStation RPG fans something to do after *Final Fantasy IX*, and *Rayman Advance* (4/5, *N64*) revived a six-year-old hit on GBA. ✱

CHARTS

JULY 2001

PC

1. Microsoft Train Simulator (Microsoft)
2. Operation Flashpoint (Codemasters)
3. Baldur's Gate II: Throne Of Bhaal (Interplay)
4. Diablo II: Lords Of Destruction (Sierra)
5. Half-Life: Generation (Sierra)

PLAYSTATION 2

1. Gran Turismo 3 (Sony)
2. Onimusha: Warlords (Capcom)
3. Red Faction (Eidos)
4. The Bouncer (Sony)
5. Formula One 2001 (Sony)

GAME BOY ADVANCE

1. Super Mario Advance (Nintendo)
2. Tony Hawk's Pro Skater 2 (Activision)
3. Rayman Advance (Ubisoft)
4. F-Zero: Maximum Velocity (Nintendo)
5. GT Advance: Championship Racing (THQ)

MUSIC

1. Eternity/The Road To Manadalay (Robbie Williams)
2. Purple Pills (D12)
3. Elevation (U2)
4. Perfect Gentleman (Wyclef Jean)
5. Castles In The Sky (Ian Van Dahl)

Overdrive

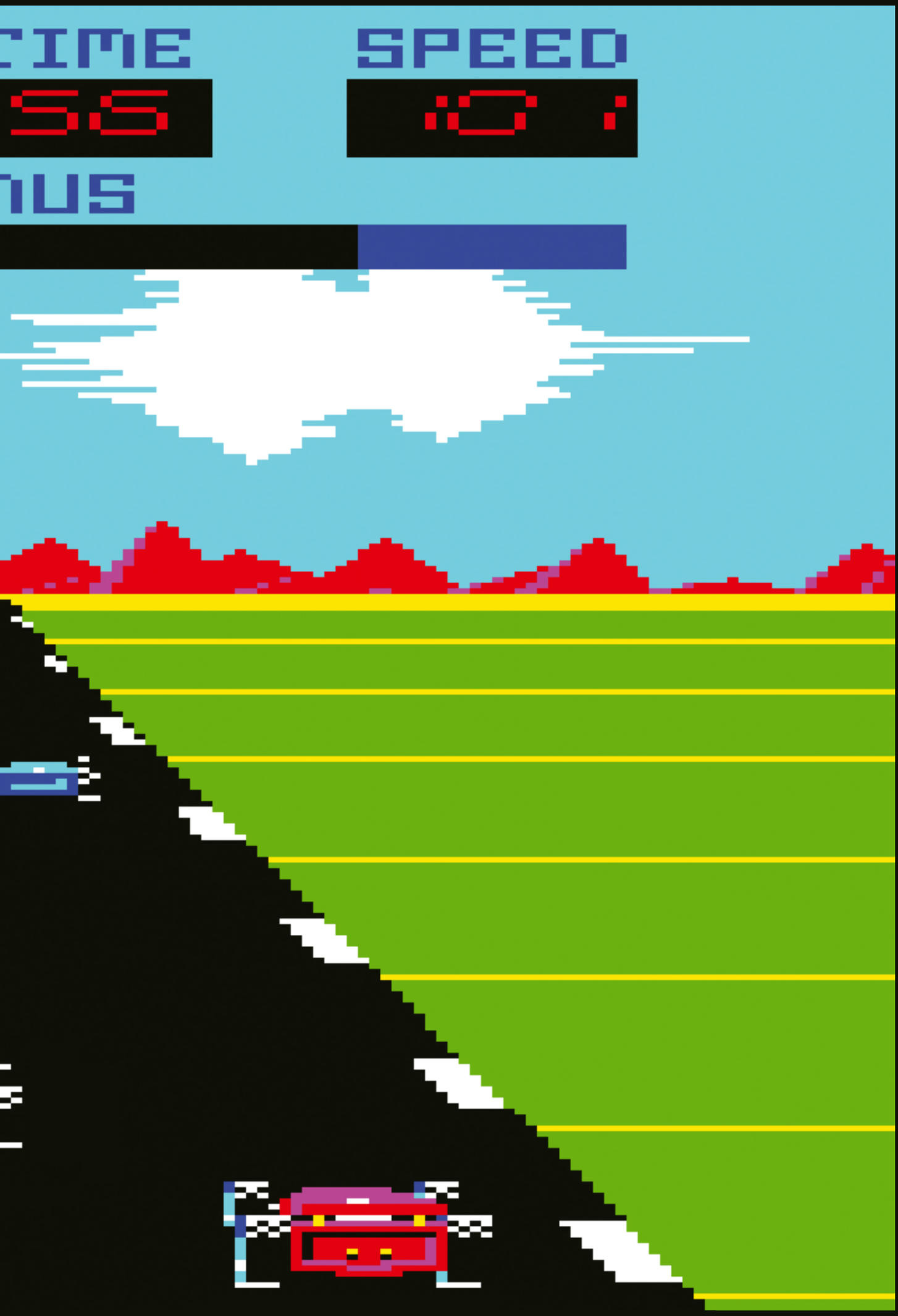
DRIVEN TO PLAY AGAIN

» BBC MICRO » 1984 » SUPERIOR SOFTWARE

It's hard to shake your first love, and the Atari 2600 is that console for me. I'll happily play the likes of *Combat*, *Warlords*, *Pitfall!* and *River Raid* to pass the time – but unfortunately, the same can't be said for *Street Racer*. Despite the fact that the basic nature of Atari 2600 games is a large part of their unique charm, *Street Racer* manages to be a little bit *too* basic for my taste.

At first glance, *Overdrive* is a million miles ahead of *Street Racer* – the colourful display and the 3D perspective both remind me of *Pole Position*. However, you'll notice that the road here is straight. That's because the road in *Overdrive* is always straight. Essentially, this means that your only goal is to avoid the racers you're accelerating past, making it very similar to *Street Racer*. The main difference is that you can advance to a new level if you overtake enough cars within the time limit, giving you a new background to admire and harder cars to pass.

The combination of slightly prettier visuals and a minor reward for doing well is all it took for me to become invested in doing well at *Overdrive*. If I need to overtake efficiently to see that next backdrop, I'll practice until I get it just right, but I still won't touch the fundamentally similar Atari game. The dividing line between 'dull and basic' and 'simple but compelling' is an extraordinarily thin one at times – and I find that fascinating. *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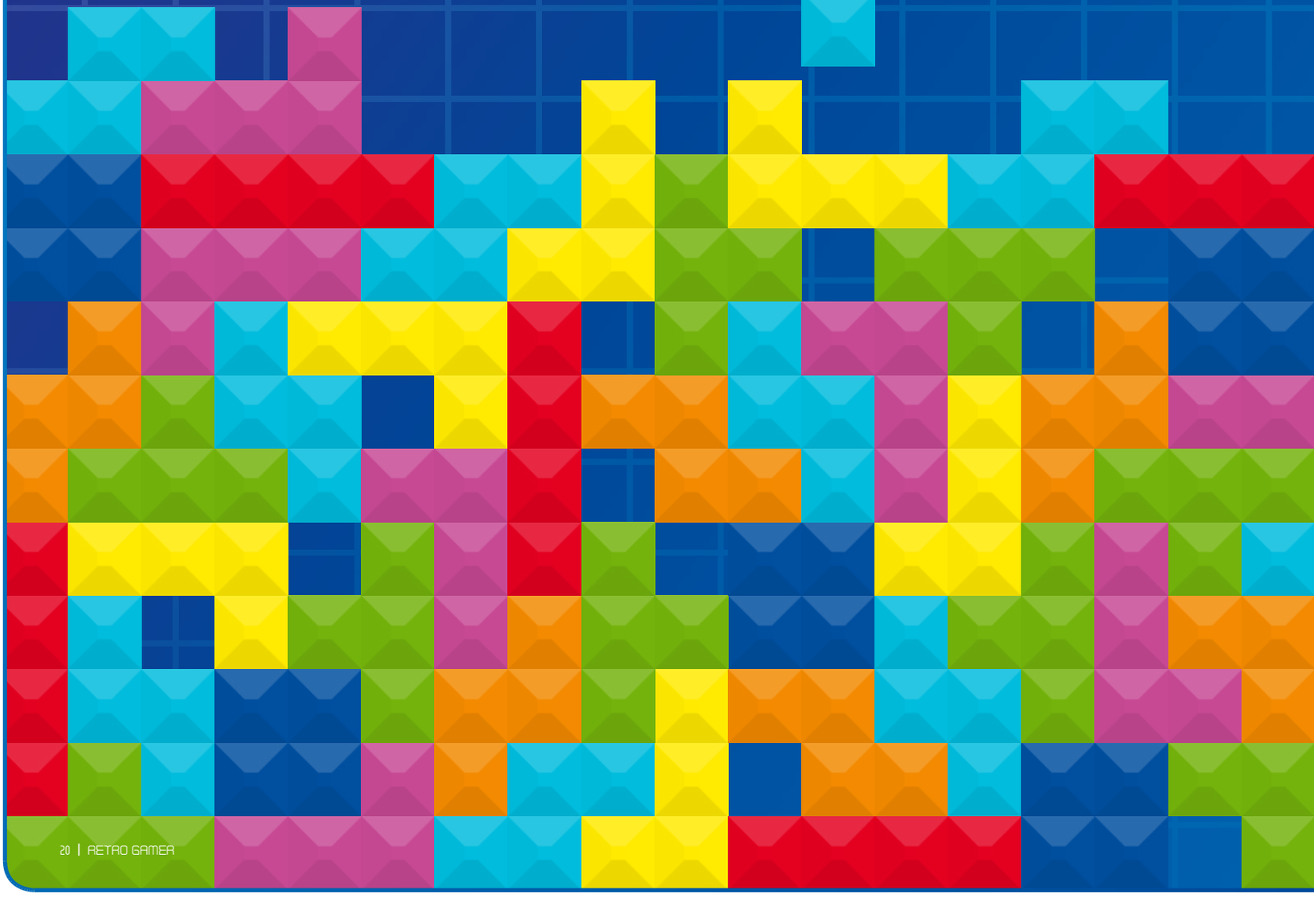
THE HISTORY OF TETRIS



TS

FOR CLOSE TO 35 YEARS, TETRIS HAS INFILTRATED THE MINDS AND HEARTS OF GAMERS. CREATOR ALEXEY PAJITNOV, AND TETRIS BOSSES HENK ROGERS AND MAYA ROGERS REVEAL HOW THIS SIMPLE PUZZLER TURNED INTO A WORLDWIDE JUGGERNAUT

Words by David Crookes

ALEXEY PAJITNOV
Creator of Tetris

HENK ROGERS
Managing director, The Tetris Company

MAYA ROGERS
President and CEO, Blue Planet Software

There are some videogames out there that are incredibly difficult to tear yourself away from. We're also aware that games can distract you from life's more tedious tasks. What to make of *Tetris*, then? A puzzler that gets so inside your brain, it can lead to the medically recognised 'Tetris Effect' – where you play so much of the game you actually start hallucinating tetrominoes in your day-to-day life. Yet it's a runaway bestseller that's essentially about tidying up the playfield over and over again. Cleaning, we imagine, has never been so successful.

It was a strong pairing of developers which saw this iconic puzzler reach dizzying, multimillion-selling heights, and it ended up in the slippy mitts of so many people and companies that the entire western licensing deal could easily become the basis of a gripping holiday page-turner. Never mind that it's already been the subject of a BBC documentary, *Tetris: From Russia With Love*, *Tetris*' origin story is richer than a Russian oligarch.

To go into the ins and outs of what happened between 1984 and 1989 would likely take over the entirety of this issue. Suffice to say 29-year-old Russian computer engineer Alexey Pajitnov toiled on his humble Elektronica 60 computer at the Soviet Academy Of Sciences in Moscow and created a prototype of an intriguing puzzle game that would eventually be fought over by companies such as Nintendo, Mirrorsoft, Spectrum Holobyte, Andromeda and Bullet-Proof Software.

The breakthrough was a PC version in 1985, created by Alexey with the help of colleague Dmitry Pavlovsky and a young programmer called Vadim Gerasimov. The whole shebang had been inspired by the board game, *Pentominoes*, which involved putting 12 types of five-square pentomino pieces on to an 8x8 grid, rotating and reflecting them to fit without overlapping. Alexey realised that 12 pieces was too much – "People would not be able to remember so many," he says – so he ditched pentominoes for tetrominoes (geometric shapes composed of four squares connected ▶

» *Tetris*' popularity skyrocketed with the Game Boy version. It would go on to become the handheld's bestselling title.

GOING MAINSTREAM

The puzzle masterpiece is so popular it's broken into other forms of media…

MUSIC

■ The single, *Tetris*, shot to number two in the UK charts in 1992. Based on the 19th century Russian folk song *Korobeiniki*, it was created by Dr Spin – the pseudonym used by Andrew Lloyd Webber – and record producer Nigel Wright. Another song called *Tetris* by Madilyn Bailey was released this year and uses the blocks as a love metaphor.

THE SIMPSONS

■ In episode nine, season 14 of *The Simpsons* in 2003, Homer is trying to pack the car only for Bart to question whether he'd be able to get all of the junk in the trunk. "Don't worry," he reassures as an infamous tune plays in the background. "This is what all those hours of playing *Tetris* were for."

TRESTLING

■ Featured in the hit comedy *The Big Bang Theory*, Trestling was introduced as combining "the physical strength of arm wrestling with the mental agility of *Tetris*". Played by characters Sheldon and Raj way back in the first season (episode *The Peanut Reaction*), the idea was to play *Tetris* while arm wrestling with the first to win in either emerging victorious.

PUBLIC ART

Image © Drexel University

■ By projecting a game of *Tetris* on the side of Philadelphia's Cira Centre in 2014, Dr Frank Lee's art installation not only created a stunning 29-storey canvas on which to play, but earned a world record for the largest architectural videogame display. Meanwhile LummoBlocks in Madrid's Plaza de las Letra used a giant screen and allowed pedestrians to play by simply walking.

MERCHANDISE

■ From T-shirts and tote bags to pillows and lights, the huge variety of *Tetris* merchandise can be seen on the streets, in the home and at work. "Merchandise is a big part of the business," says Maya Rogers. "One of the things we found is that any merchandise where people could see the game and imagine playing it always works very well."

» A photo of the original *Tetris* – the game has come a long way from the simplistic visuals of an Elektronica 60 computer.

» [C64] *Tetris* on Commodore 64 was part of the first wave of conversions by Mirrorsoft.

▶ orthogonally), cutting the number of shapes down to seven.

From there, the game found its way out of the USSR. It was ported to the Apple II and Commodore 64 by Hungarian coders then, in 1987, it was converted to many machines for the North American and European markets. The following year, Bullet-Proof Software's boss Henk Rogers spotted the game at the Consumer Electronics Show in Las Vegas and became determined to secure the rights. He released versions for the NES and PC in Japan and, following trips to Moscow, moments of panic and companies creating versions they weren't actually allowed to, he ended up walking away with, among others, the licence to produce ports for handhelds. By putting this into the palms of Nintendo, *Tetris* was created for the Game Boy in 1989. Bundled with the console, it became the best-selling puzzle game of all time, with 30.26 million copies sold.

Tetris suited handheld gaming extremely well. "The Game Boy had a small monochrome screen but *Tetris* was perfect for it because the blocks were easy to see and manipulate," Henk says. As a true pick-up-and-play title, it could occupy short bursts of time while being easy to learn. Players simply needed to move the pieces left and right, rotate them and slot them into place within other blocks at the bottom of the playing field. Getting four lines achieved a tetris, removing them from play. But just getting one line resulted in it being cleared it. It's then a matter of keeping it up so the blocks don't reach the top.

"To me, the Game Boy was made for *Tetris* and *Tetris* was made for Game Boy," Henk continues.

But that's not to say it doesn't work on other formats. *Tetris* has the world record for being the most ported videogame, covering more than 70 platforms. It's available in 185 countries and in 50 languages. It's even been known to help the sick – and we're not kidding: a university study in 2017 claimed it can prevent post-traumatic stress disorder by lessening intrusive thoughts, while playing for three minutes a day is said to decrease craving for addictive substances by a fifth.

Much of that is down to Henk. He struck up an instant rapport with Alexey during his negotiations and the pair became close. "He was the only one who knew anything about games," Henk says. "Everyone else were bureaucrats or KGB." Henk also influenced the direction of the game. "Alexey's original was all about survival so I put in the additional play concept of having points for clearing lines and bonuses for getting rid of three at a time, which changed the way people played," he continues. "I also broke *Tetris* up into levels."

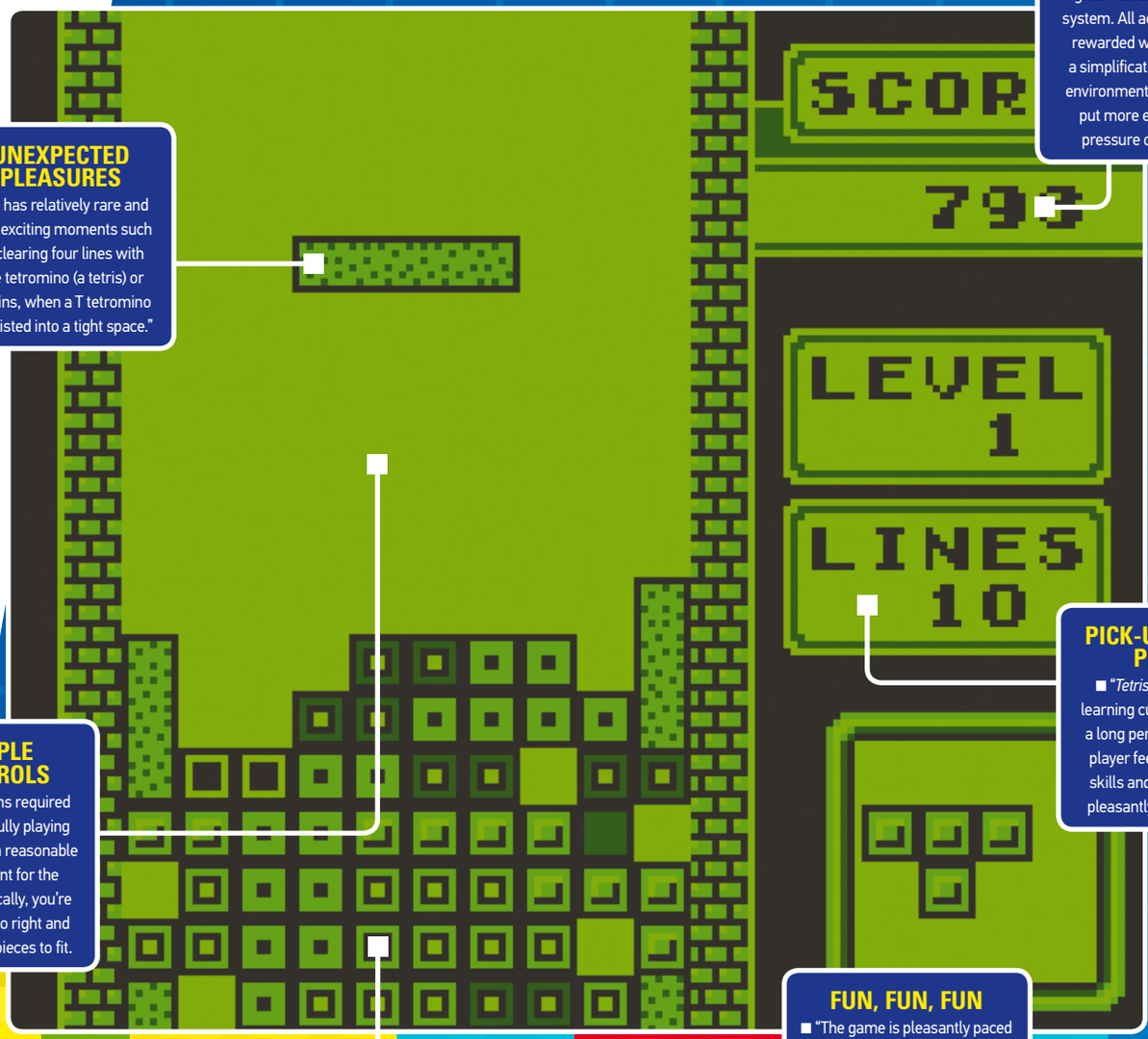
From then, *Tetris* snowballed, evolving, changing and mashing up with other games and concepts. Today, The Tetris Company officially recognises in excess of 220 versions of the game and the first of these came straight away, when in 1989 Alexey, with the help of Andrei Sgenov, designed *Welltris*.

Instead of falling down the screen, *Welltris* had blocks falling into a pit. Players would then move the pieces from wall-to-wall before considering how they'd slot into place at the bottom to complete vertical or horizontal lines. Originally released for DOS and the Mac and ported to 8-bit and 16-bit home computers, it was inspired by another puzzler, *Blockout*, developed in Poland by California Dreams.

"I didn't like *Blockout*," Alexey explains. "It used 3D wireframed blocks that only showed the edges and I thought a lot about how it would be possible to do it myself. I decided to essentially make *Welltris* a 2D game with a real strong sense of 3D by having flat pieces fall down the surface of the walls. The effect of jumping the piece from wall-to-wall, especially on the bottom, uses really complicated 3D effects but it still has the addictiveness of *Tetris* because you work with 2D pieces." ▶

THE DNA OF TETRIS

Alexey Pajitnov tells us why he thinks Tetris is beautifully addictive and works so well



UNEXPECTED PLEASURES

■ "It has relatively rare and very exciting moments such as clearing four lines with one tetromino (a tetris) or T-spins, when a T tetromino is twisted into a tight space."

RICHLY REWARDING

■ "The game has a natural, great reward/punishment system. All achievements are rewarded with a score and a simplification of the game environment while mistakes put more environmental pressure on the player."

PICK-UP-AND-PLAY

■ "*Tetris* has a good learning curve – there is a long period when the player feels his or her skills and abilities are pleasantly improving."

SIMPLE CONTROLS

■ "The actions required for successfully playing *Tetris* are both reasonable and pleasant for the player." Basically, you're moving left to right and rotating the pieces to fit.

FUN, FUN, FUN

■ "The game is pleasantly paced and it is also fun to play, to watch and to compete."

FAST PUZZLING ACTION

■ "*Tetris* combines puzzle-solving and real-time actions," Alexey says, pointing to the way gamers have to think on their feet as they slot blocks into full lines to clear them.

CONVERSION CAPERS

Official versions of Tetris that will steal away your time

NINTENDO

GAME BOY

■ Nintendo's Game Boy version is the most iconic of them all, delivering a pure green screen game of *Tetris* that showed the next available piece, kept score and levelled up when you got ten lines.

NES

■ Three versions existed on the NES and this was Nintendo's. Although it only allowed for single players, it had bigger and more vivid blocks than Tengen's version and it was faithful to Alexy's original game.

SPECTRUM HOLOBYTE

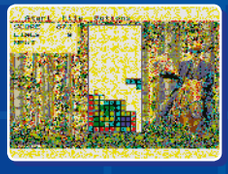
DOS

■ This version was the one that originally got PC gamers hooked to their keyboards. Not only was this rendition fast and smooth, it let you push up to change the background on the fly.

APPLE II

■ After choosing your level and height, you could get down to business. The pieces fell slowly, almost jerkily, to the sound of Russian folk music but the changing backgrounds added variety.

ATARI ST



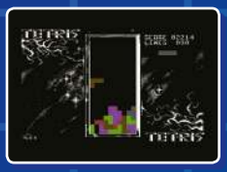
■ Spectrum Holobyte produced its own fantastic version of *Tetris* for the Atari ST. It had some stunning backdrops depicting Russian cultural iconography as well as some classic Eastern European tunes.

AMIGA

■ The keyboard's control layout could have been better, but this game avoided the horrid garishness of the Mirrorsoft version and so it felt much more like pure version of the much-loved puzzler as a result.

MIRRORSOFT

COMMODORE 64



■ Set against a black and white backdrop, the coloured basic-looking blocks of this version of *Tetris* really stood out. It was certainly a graphically unique, almost haunting version of the game.

ZX SPECTRUM

■ Depending on which version you went for – 48K or 128K – you'd have different title music and either sound effects or a tune playing as you got to grips with this surprisingly smooth-running rendition.

AMSTRAD CPC

■ Played to the backdrop of a god-awful tune, *Tetris* on the CPC also had eye-searing graphics, a mind-boggling striped background and frustrating controls. Not one of the finest ports if we're honest.

BBC MICRO

■ A glorious, basic-looking *Tetris* port that features ten levels of skill and literally throws you straight into the action. Its major disappointment are the simple beeps – no mood-setting music here.

ATARI ST

■ Quite why Mirrorsoft decided to include a fuzzy yellow background in this version of the game is anyone's guess (it can be turned off). You'd have to perform exceedingly well to get on the high score table, too.

AMIGA

■ Near-identical to Mirrosoft's Atari ST version, the music could become annoying after a while but its perspective effect on the blocks was nice and it was ranked one of the 100 best games by *Amiga Power*.

TENGEN

NES

■ This Tengen version is often considered to be the best thanks to its presentation (coloured blocks become the same colour as they land) and options including cooperative, versus and against-AI modes.

ARCADE

■ The Tengen NES version's style had been influenced by this rendition of *Tetris*: Atari Games' arcade port of the game. Of course, the arcade version looked and sounded more impressive.

SEGA

ARCADE

■ Sega's arcade *Tetris* was a hit across Japan where players loved the challenging marathon mode. Pieces can rotate anticlockwise and there was time to rotate a piece on the ground before locking it in.

MEGA DRIVE

■ Nintendo became synonymous with *Tetris* because Sega's efforts were trashed. But it's worth seeking out: there are two rotate buttons and doubles mode where players share the same pieces well.

BULLET-PROOF SOFTWARE

NES

■ As a less-well-known version of *Tetris* on the NES, Bullet-Proof's effort was nevertheless the first. Clear 25 lines to advance and try not to use up your three lives too quickly.

MSX2

■ With beautiful presentation and the existence of three lives as with the NES version, *Tetris* on the MSX was detailed yet slow. Pressing up to rotate the pieces was confusing, though.

"DR MARIO WAS A BLATANT ATTEMPT TO COME UP WITH A TETRIS REPLACEMENT"

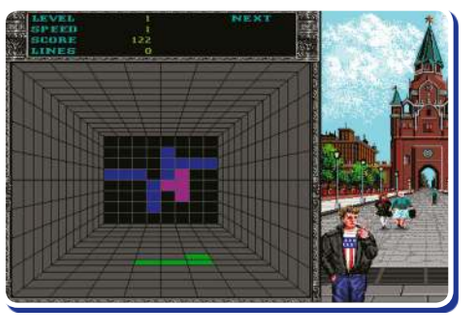
Henk Rogers

Welltris was followed by *Hatris*, a more peculiar take on *Tetris* because, as the name suggests, it involved headwear. Players stacked five identically-styled hats and it remains one of Alexey's favourites. "We originally considered doing something with utensils and other kitchen objects but thought hats would be more fun. It was very funny and we couldn't stop playing it. We hoped it would be really popular."

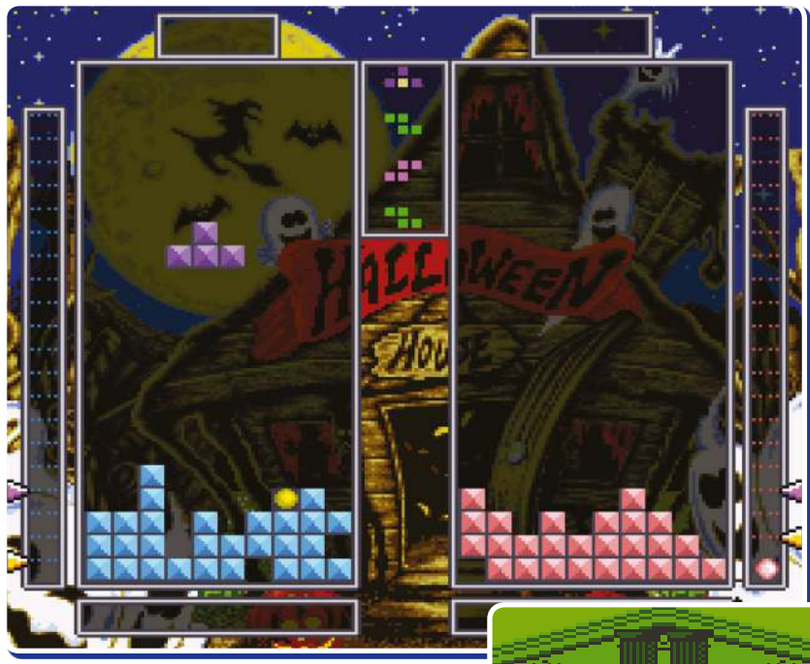
Henk did, too, and he released it for the NES, Game Boy and TurboGrafx-16, while an arcade version was created by Video System. "But the sales didn't match our expectations," Alexey laments. "I still can't explain what was wrong with it and why it was not as addictive as we wanted it to be. We thought it had some smart moves so it was a big disappointment."

Such bafflement was less apparent for *Faces Tris III*. Although this game won Best Action/Arcade Program in the Software Publishing Association's Excellence in Software Award, Alexey, who worked on it with Vladimir Pokhilko, admits: "Personally, I didn't like it very much. We forced it on Spectrum Holobyte and it was interesting because the pieces would form a human face. But somehow the effect of your mistakes was an ugly image on screen." As it turned out, *Faces Tris III* was the last *Tetris*-style game that Alexey directly created. But still the franchise continued.

Strong efforts were made to keep *Tetris* fresh. *Super Tetris* in 1991 had bolts of lighting, competitive and two-player co-op and, crucially, bombs that would remove as few as two or as many as 16 blocks. *Tetris 2 + Bombliss*, by Bullet-Proof Software, meanwhile, allowed for traditional games of *Tetris* but included a set of games that connected bombs to the pieces and allowed for greater explosions if there were many lines. Nintendo's *Tetris 2* changed the pace and inserted extra, irregular tetromino shapes, some of which did not adjoin. It also popped in some bombs for good measure, adding two-player simultaneous play and encouraging gamers to match blocks of the same colour. As the box suggested, it was a "tougher *Tetris* challenge".



» [DOS] With *Tetris* doing very well, Alexey Pajitnov was hoping for equal success with *Welltris*.



» [SNES] *Tetris Battle Gaiden* was a Japan-only release by Bullet-Proof Software where players shared one queue of pieces.

» [Game Boy] Alexey Pajitnov experimented with *Tetris* and ended up with *Hatris* that had two hats fall from the sky in order to be matched.

"I liked these but I really enjoyed *Tetris Battle Gaiden* – that was probably one of the best games," says Alexey of those early iterations. *Tetris Battle Gaiden* was published on the SNES by Bullet-Proof in 1993. "It was really innovative with some good ideas – they put extra levels on top of the regular *Tetris* game and when you strategically collected specials, you could use it as a defence or an attack weapon," Alexey continues. "But unfortunately it was a rushed production and they didn't polish it enough. That kind of game needs three or four years just to balance it accurately and make it fun. The balancing of a game is part of the testing process and it's usually done on a very tight schedule."

Even so, *Tetris Battle Gaiden* forced players to rethink their strategies. Gamers strived to defeat their opponent by making use of the four special powers handed to each playable character and it ensured success could only come with a sharp eye, good timing and dollops of strategy. It appeared to go down better than *Dr Mario* (despite it being one of the better games inspired by *Tetris*). "I was pissed off about that game," admits Henk. "*Dr Mario* was a blatant attempt to come up with a *Tetris* replacement and I thought they did it in a cheesy way."

Originally a NES and Game Boy title, *Dr Mario* was enhanced and paired with *Tetris* on the SNES for the release of *Tetris & Dr Mario* in 1994. It didn't affect the franchise, however. Henk cemented his relationship with Nintendo ("Which was good before *Tetris*," he says, having published *Black Onyx*, the first RPG made in Japan on the NES in 1988). This led to Bullet-Proof Software releasing *Super Tetris 3* for the SNES at the end of 1994.

A year later, Henk set up a new company, Blue Planet Software, based in Hawaii, and it became the exclusive agent for the *Tetris* brand. In 1996, The Tetris Company was formed and a set of guidelines were created to pin down quality standards and consistency in the games that were created from that point on. By outlining a minimum specification for *Tetris* titles, third-party developers could be sure their game would be granted a licence. They'd specify what buttons should do what, for example, so players could easily move from platform to platform with comfort. They'd also discuss super rotation of the pieces to dictate how the blocks spawn and ought to behave.

Henk and Alexey vowed to keep raising the bar. Perhaps more importantly, Alexey began to be rewarded. Up until that point he had not received a single ruble for his efforts on *Tetris* due to the complications of Soviet-era contracts. Instead he had granted his rights to the government for ten years so 40 million sales counted for nothing in his pocket. With the rights reverting to him, he could finally collect royalties. "That was good," he says modestly.

Indeed it was because *Tetris* was on a roll. There had been a couple of Virtual Boy releases – Bullet-Proof's *V-Tetris* in Japan and Nintendo's US-only *3D Tetris*, the former adding a cylindrical puzzle mode to the traditional game and the latter rendering the blocks as 3D wireframe models. Meanwhile, *Tetris Blast* was released in 1996 for the Game Boy as a version of *Bombliss* that needed bomb pieces to clear lines, throwing in some dominoes and triminoes for good measure. This version had a cool tournament mode that placed blocks

BLOCK BUSTERS

The tetromino sequels that are worth your time

TETRIS: THE GRAND MASTER ▸

■ This arcade game was a chance for advanced players to prove how good their skills were. Rather than level up by clearing lines, players would see the level counter increase for each piece dropped and for every line cleared. The speed would rise and eventually pieces would instantly drop (at a speed known as 20G).

TETRIS DS ▸

■ As well as offering the standard game (albeit with 8-bit homages to other Nintendo titles on the top screen and endless rotating at the bottom), *Tetris* on the DS handheld console arguably picked up where the Game Boy *Tetris* left off. Its touch mode made good use of the stylus as you shifted blocks at the bottom to allow the creation of rows.

◂ PUYO PUYO TETRIS

■ The tile-matching game *Puyo Puyo* has long been popular in Japan, with blobs falling down the screen and players looking to match them by colour in groups of four to create huge combos. It's very strategic and tactical and, in a mash-up with *Tetris* (particularly in the Fusion mode), has formed a superb follow-up that heavily emphasises competitive play.

◂ TETRIS ATTACK

■ Released for Nintendo's Game Boy and SNES, this spinoff title includes the *Tetris* name and it sure has blocks in it. But they don't fall, nor are they made up of four squares, and so the overall package is, in truth, simply a match-three puzzle game that uses *Tetris* brand name to draw in fans. Still, it's great fun, with a single-player and multiplayer modes.

TETRIS GIANT ▸

■ From the tiny screen of the Game Boy to the colossal arcade machine that is *Tetris Giant* the puzzle franchise has come a long way. But although the fast onscreen action is highly attractive in this version (the grid on offer here is a chunky 6x7 rather than the usual 10x20), it's the humongous controllers, one red and one green, that truly catch the eye.

MAGICAL TETRIS CHALLENGE ▸

■ Produced by Capcom, this version features Disney characters but, more importantly, some nice innovations. The Temporary Landing System lets you see where a piece is heading, while the 'magical' mode lets you send hard-to-fit pieces of more than four blocks to opponents when you clear two or more lines. It also has great music.

◂ SUPER TETRIS 3

■ Created by Blue Planet Software for the SNES, *Super Tetris 3* was played to the traditional background tune of *Korobeiniki* and it not only allowed up to four players in a Familiss mode, it inserted a *Bombliss*-style game with Sparkliss and, crucially, amazed gamers with Magicaliss: create a line of a single colour and every other block with that shade would vanish.

◂ TETRIS BLITZ

■ Henk Rogers tells us that he wanted to get the gaming time of *Tetris* down to two minutes in this iOS and Android title as it meant it could be playable between train stops. *Blitz* also got you spending thanks to its freemium model but it made use of a great one-touch control system.

TETRIS PARTY DELUXE ▸

■ Offering lots of variations on *Tetris*, this Wii and DS title included a number of fun modes such as Field Climber which had players trying to get a tiny character to the top of the screen and Bombliss which hadn't been seen since 1993. The Sprint mode had you frantically trying to clear 40 lines in the fastest time possible. There was co-op versus co-op, too.

TETRIS ULTIMATE ▸

■ Released in 2014, this game marked the 30th anniversary of *Tetris* and it was developed for the Nintendo 3DS before being made available on the PlayStation 4, Xbox One, PlayStation Vita and Windows. It got top marks for its smooth online multiplayer, with up to seven players able to do battle. There were also time and marathon modes to tackle.

"IT WAS HUGELY INTELLECTUAL AND I STILL ENJOY IT FROM TIME TO TIME"

Alexey Pajitnov

▶ on the field of play prior to the start of the game as well as a lovely battle mode which entailed destroying a creature – most satisfyingly by dropping blocks on its head. Meanwhile, a new puzzle mode was added for *Tetris Plus* where you needed to get a climbing professor to the bottom of the screen by clearing blocks from under him, trying hard not to crush his head on the spikes above.

None of those were anywhere near as odd and innovative as *Tetrisphere*. "That was a very strange project which I did with Ken Lobb, my friend at the time," says Alexey. "We'd worked at Microsoft together and he was really fascinated by the idea of *Tetris* of the sphere. But it was too complicated, even though it was interesting to work on."

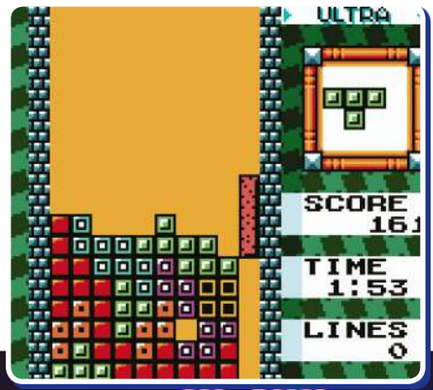
Developed by H20 Entertainment and published for the N64 by Nintendo of America, *Tetrisphere* was revolutionary and polished to near-perfection but it required a lot of learning. Perhaps for the first time, a game of *Tetris* was pushing the graphical boundaries of a machine. Wholly original, it revolved around a rotating ball that you pulled blocks off in layers to reveal enough of the core. "It was hugely intellectual and I still enjoy it from time to time," Alexey says.

Other N64 titles followed. *Tetris 64* was released in Japan and it was notable not just for allowing up to four players but for being the only game that ever made use of SETA's Biosensor, a device that connected to the controller's extension port and came with an ear clip. As daft as it would make you look, it measured the player's heartrate and altered the speed of the game depending on whether you were close to cardiac arrest or chilling. The concept was certainly more out there than, say *Tetris 4D* on the Dreamcast or *Kids Tetris* by Hasbro. *Tetris DX*, a version of the game for the Game Boy Color from 1998, was a little gem, however.

"For *Tetris DX*, Nintendo came to us with the Game Boy Color and asked if we could keep the same game," says Henk. "But we designed the ultra mode which built on the marathon mode by having a three minute time-limit. We called it ultra because there was a character in Japan called Ultraman who, when the world was going to hell, would have three minutes to defeat the monsters. It kind of became a new standard."

By now, of course, gaming had (one could argue, perhaps controversially) come on in leaps and bounds, so tiles falling and fixing into place could easily be seen as old hat(tris). *Tetrisphere* was proof that the concept could be modernised and tweaked, while still being faithful to the original, but there were other approaches to *Tetris* as it continued to prove a mainstay of gaming.

Just before the turn of the 21st century, for instance, the arcade was blessed with *Tetris: The Grand Master*, a chance for players to prove how accomplished they were by upping the ante. There was also *The New Tetris* for the Nintendo 64 that included real-time renders of famous buildings and a new gaming mechanic where you could make a four-by-four block that, when cleared, would generate many point-scoring lines. Players could also hold a piece that could be swapped with one that was falling and see the next three blocks for ▶



» [Game Boy Color] *Tetris* came to the GBC in the guise of *Tetris DX* which included a three-minute Ultra mode.

» [N64] *Tetrisphere* was a gorgeous-looking game putting a very different spin on the *Tetris* franchise.

HOW MUCH!?

A version of Tetris has collectors' wallets cowering in fear

In July 2011, an eBay seller created a listing for the Japanese Mega Drive version of *Tetris*. The Buy It Now price? A cool $1 million, but then this game – signed by Alexey Pajitnov, no less – is the most rare of all of the *Tetris* ports. With an estimated ten copies thought to exist in the entire world today, it's little wonder it is so highly sought after.

The reason there are so few units around is down to the licensing fiasco surrounding *Tetris* in its early years. Bullet-Proof Software had the rights to console versions of the game in Japan and so Sega's game – produced at the same time as the System-16 arcade version – was blocked from being sold.

The idea is that Sega then destroyed its production run but some copies leaked out. Whether or not that makes it worth such a high sum is open to debate, though. The seller – shinsnk – is thought to have originally bought the game for $16,000 four years previously and, in truth, that sounds about the right price.

» [N64] *Magical Tetris Challenge* combined *Tetris* with, well… magic, alongside a cast of Disney characters.

THE TETRIS EFFECT

The iconic puzzler heads into the world of virtual reality

According to a Harvard University study in 2000, 60 per cent of people who play *Tetris* for more than seven hours over three days end up seeing blocks falling after they stop playing. They also look at buildings and seek to move the blocks in their mind to complete lines, and even take to dreaming about those damned tetrominoes.

So what have the brains behind *Tetris* done? Well, licensed a trippy game called *Tetris Effect*, which is named after the phenomenon. What's more, the reigns have been handed to Enhance president and CEO Tetsuya Miziguchi, who created *Lumines* and *Rez Infinite*. It will be released for the PS4 with PS VR support and it promises to infiltrate your mind like never before.

"The idea behind *Tetris Effect* the game is to amplify and enhance that same magical feeling where you just can't get it out of your head, and not just the falling shapes, but all the visuals, the sounds, the music – everything," Miziguchi wrote on the PlayStation Blog.

He says this will be done by using background elements, audio, special effects and, last but not least, pulsating, dancing, shimmering, exploding, musical pieces. There will also be more than 30 stages complete with music, characters and animation to provoke emotional responses and convey moods.

"SMARTPHONES INHERENTLY CHANGED HOW TETRIS IS PLAYED"

Maya Rogers

» [Arcade] *Tetris: The Absolute The Grand Master 2 Plus* – it's name is nonsensical and its difficulty takes no prisoners.

▶ better planning. Then there was *The Next Tetris* that had you clearing pre-placed blocks, introducing multicoloured pieces which really had you scratching your head. And, of course, *Magical Tetris Challenge,* developed by Capcom and starring Mickey Mouse, Minnie Mouse, Donald Duck and Goofy, it let you play seven variants of the game, with the upside-down mode being particularly good fun since every line you cleared was added to your opponent's pile. *Tetris Worlds* introduced the infinite spin where tiles could be rotated after touchdown.

In 2002, Henk launched Blue Lava Wireless to develop mobile phone versions of *Tetris* which he sold to Jamdat three years later, granting it an exclusive 15-year licence to publish *Tetris* on mobile phones. That power switched to Electronic Arts in 2006, the year *Tetris* for the iPod was launched, bringing it to yet another platform and a new market. Of greater note was the release of *Tetris DS* which followed a few *Grand Master* sequels and *Tetris Elements* (a game that let you import MP3 tunes and incorporated the natural world into *Tetris*). "With *Tetris DS*, we were able to put the game on another Nintendo handheld and they did a great job of implementing it," says Henk.

The DS version made use of the handheld's two screens and it was a delight for 8-bit gamers thanks to its themes based on *Donkey Kong, Metroid, Super Mario Bros* and the *Legend Of Zelda* among others. Tower mode had you using the touch features to free balloons by clearing a mass of pieces from the screen. The game also ended up in the Guinness World Records, this time as the first wireless *Tetris* game. It allowed ten players to compete locally or four via Wi-Fi.

T*etris* was on a high and, in recognition for his incredible contribution to gaming, Alexey was handed the First Penguin award (now the Pioneer Award) at the Game Developers Conference in 2006. *Tetris* also moved effortlessly from one generation to the next: come 2007 and *Tetris Splash* (complete with a watery theme and six-person online play) was launched on Xbox 360's Xbox Live Arcade, becoming the first game published under The Tetris Company's new subsidiary, Tetris Online.

By now, Henk' daughter, Maya, had joined Blue Planet Software and she headed up game development, global licensing, marketing, brand management and IP enforcement. She helped pushed *Tetris* into different directions. *Tetris Party* was released as WiiWare, for example, making the game playable via a Balance Board. EA pumped out *Tetris* for the iPhone and iPod Touch, while an online multiplayer *Tetris* went to the top in South Korea.

» [Wii] *Tetris Party* brought the puzzling madness to the Wii, and added a mode which let you control the action with the Balance Board add-on.

In 2010, *Tetris* debuted on the iPad and surpassed 100 million paid mobile downloads making it the best-selling mobile game for its time. "If you compare the original *Tetris* to what it is today, it's very different," Maya says. "Smartphones inherently changed how *Tetris* is played. There are now controls and it's all swipe touch. We work hard on prototyping and development to ensure *Tetris* is available on each new platform."

The *Tetris* guidelines are still in place and steps are taken to ensure they're adhered to. "We're technically a licensing company and so we licence our IP to different developers, looking at whether they are the right partnership for that market," Maya continues. "We work with their development team and train their QA department to teach them what has to be done and what can be done. We spend a lot of time talking about what *Tetris* is today and what's been done in the past, brainstorming ideas for new platforms."

Some of those have included experiments in augmented reality such as in *Tetris Axis* for the 3DS. Games have been produced for Facebook such as *Tetris Battle* and *Tetris Stars*, allowing for online play. Electronic Arts worked on the ultimate casual *Tetris*, *Tetris Blitz*, by ensuring games would last for just two minutes at a time. But while the hunger for platforms has even seen *Tetris* appear on the Amazon's Fire TV and Ouya the biggest breakthrough has been *Puyo Puyo Tetris* in 2014. "That's been developed by Sega and it's on every console under the sun," says Maya.

Puyo Puyo Tetris was originally rolled out in Japan for the 3DS, Wii U, PS Vita and PS3 before getting an outing on the Xbox One, PS4 and Switch. It made its way to North America and Europe last year and it's sensational, combining the styles of Japanese favourite *Puyo Puyo*, a tile-matching game, with *Tetris* in the Fusion mode. It's fast-paced and competitive with blocks and puyos alternating on the game board and dollops of strategy involved. Can it be bettered by the forthcoming *Tetris Effect* which takes the into modern VR? We'll have to wait until later this year for an answer.

In the meantime, there's still a concern about clones. "*Tetris* is one of the most copied games in the world and we spend time cleaning up the landscape," Maya says. Asked whether those clones have ever led to fresh ideas, she adds: "It does happen and they end up becoming a licensee but I would say most of the time we've already thought of it."

Still, at least it shows there's interest. To date, there have been around 500 million mobile downloads ("As far as the bank goes, that's my favourite," laughs Henk). People are also getting better at the game: American Kevin Birrell became the first player outside of Japan to achieve grandmaster status in *Tetris: The Grandmaster 3* in 2015. But it must keep fresh. "Our vision now is how do we keep *Tetris* going for the next 30 years?", Maya says. We're sure they'll find a way. ✱

» [Xbox] *Tetris Worlds* offered a host of new modes alongside four-player multiplayer.

» [PS4] *Puyo Puyo Tetris* is a great mashup of franchises – we still play it competitively in the office.

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The Making of Punch

Oh we do like to be beside the seaside and Punch and Judy recreated a traditional British summer day on the beach, complete with a fight at the end. Dean Hickingbottom and David Bradley tell us, 'That's the way to do it!'

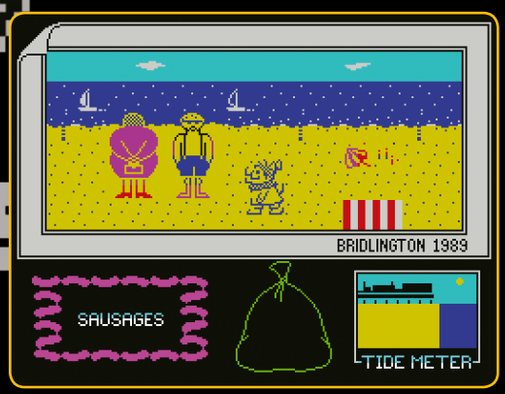
Words by Paul Drury

» Dean Hickingbottom (left), artist and designer, and David Bradley (right), codesigner and coder.

Brutal scenes of domestic abuse, graphic depictions of animal cruelty and a shocking climax involving beating a baby to death. *Punch And Judy* really is an example of an Eighties 'videogame nasty'. "It's not in the spirit of today's society, is it?" admits Dean Hickingbottom, artist and codesigner of the game, "but if you go to a *Punch And Judy* show, that's what happens. Punch is still throwing the baby downstairs. Apparently it's okay in the puppet world."

Released near the end of the 8-bit era, *Punch And Judy* is an unlikely mix of British seaside charm and extreme violence. Playing as the smiling assassin Mr Punch, you must wander the mean streets of Bridlington, collecting the required number of pieces to erect your puppet booth. Then, in a disturbing example of modern slavery, you forcibly recruit your fellow cast members, including your wife, baby son and pet dog, by beating them with a large truncheon before bludgeoning them to death on the beach in front of an audience of traumatised children.

"We were as politically correct as the actual shows themselves," laughs David Bradley, fellow designer and coder of the C64 and Amstrad versions. "They are very dark indeed but it was all tongue in cheek as far as we were concerned. It was no *Grand Theft Auto*!"



» [ZX Spectrum] A pair of beach bums look unimpressed at your puppet booth.

Dean and David were not unaccustomed to pixellated fisticuffs, having handled conversions of *Bangkok Knights* and *Urban Warrior* as Video Images, the games development co-op they had set up with friend Dave Colley. After a year or so of contract work for publishers, the pair decided it had taken its venture as far as it could and opted to join Clockwize, which involved moving from Scunthorpe to Bridlington, on the East coast of Yorkshire.

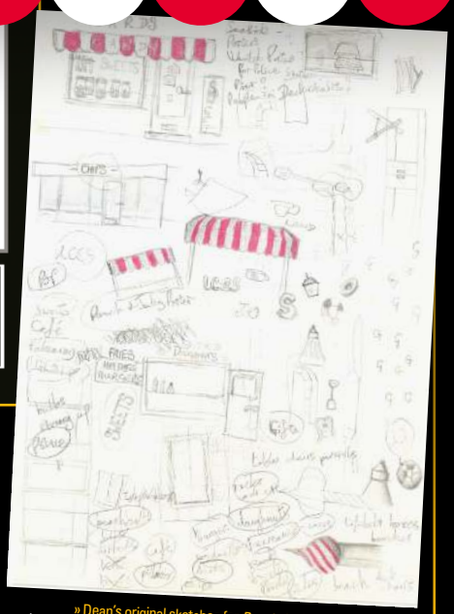
"Denis Hickie, one of the directors at Clockwize, actually drove from Bridlington to Scunthorpe to pick us both up," remembers Dean. "The company was run out of this former guest house with loads of rooms, so we both ended up living there and would get up at five minutes to nine every morning and stagger downstairs to the 'office'. It even had a small bar in the corner."

One of their first projects for their new employer was *Punch And Judy*, the title suggested by one of the directors of Alternative Software, which would publish the finished game as part of its budget range. Their new surrounding provided the backdrop to the action, with many of the 64 screens based on actual Bridlington locations, from a gift shop selling tourist tat, to a fish and chip shop and the famous Joyland Amusements, once the largest arcade in the country. "If you look at the screen, it's supposed to be a postcard, with the corner turned down," explains Dean. "If you go to the seafront and walk all the way to the left you can see Flamborough Head in the distance, with the lighthouse."

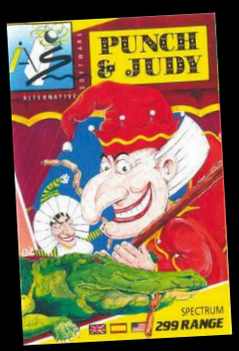
Part of the charm of the game is how quintessentially British it is. You flick between familiar seaside scenes, dodging the patrolling policeman and

& JUDY

» [C64] What's a day by the sea without a fish and chip supper?



» Dean's original sketches for *Punch And Judy*



IN THE KNOW

- **» PUBLISHER:** ALTERNATIVE SOFTWARE
- **» DEVELOPER:** CLOCKWIZE
- **» RELEASED:** 1989
- **» GENRE:** ARCADE ADVENTURE

an unwanted trip to the cells, and buying strings of sausages from the butchers to distract the hungry crocodile, another rogue cast member. Even the in-game timer is represented by the encroaching tide heading ever nearer to the pier head. "We were all in an open plan room with the target 8-bit machines and a PDS development system," recalls David. "We had the basic idea and we'd just sit down and start coding, getting the 'game loop' down, building the necessary tools to allow us to map out a world and design sprites and tiles and so on. It felt like a collective effort and we all threw ideas in. It was very organic but we didn't hang about either."

The whole game only took a few months from initial drawings to something that could be sent to the publishers for playtesting. Though both admit that producing games for Clockwize could feel a little like working on a production line, they did take their task seriously and aimed to produce a polished title with a distinctive visual look. We assume they modelled Mr Punch on Bruce Forsythe for added realism? "Ah, you mean the chin," laughs Dean. "Actually, if you look at the title screen, it's more or less a copy of a book we borrowed from the local library on the history of Punch and Judy. All the characters were in there – the crocodile, the policeman, the dog, Scaramouche… yes, he's part of the folklore!"

The game does indeed culminate in a violent fandango as Mr Punch skips across the puppet booth, button-bashing seven shades out of the cast, whilst avoiding the long-ish arm of the law. It's an oddly frenzied finale to a game with some interesting ideas but which rather plods in the preceding 'collect-'em-up' sections. As a budget title, though, it provides a decent challenge and for Dean and David, it has a small if special place in their hearts as the game that brought them to Bridlington. Both still live in the town and Dean ended up marrying Teresa Hickie, the boss's daughter. They have two children and just like Punch and Judy, remain together to this day. "Except we don't throw our kids downstairs," Dean assures us. ✱

CONVERSION CAPERS

ZX SPECTRUM

■ Dean produced the graphics for this using Oxford Computer Publishing's Art Studio and completed bits of the coding when original Spectrum programmer Gaz Wood left. Your final enemy in this version is the crocodile, which requires a stern beating, whilst you keep a close eye on your 'truncheon meter'.

AMSTRAD CPC

■ David coded the CPC release and it remains his favourite. "I was pleased with the Amstrad version and I always thought the C64 lacked somewhat in comparable capabilities, colour palette for one and a limited number of hardware sprites," he says in a Darran-pleasing outrage.

COMMODORE 64

■ David also handled the C64 version, which opts for a final battle with a crawling baby, like a horrible reimagining of that scene in *Trainspotting*. The large, colourful sprites and postcard humour remind us of the work of those other Bridlington-based game developers, Taskset.

MSX

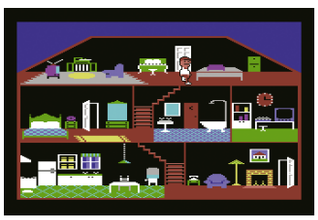
■ Now this is an odd one. Although Dean remembers converting *Punch And Judy* to the MSX, the only existing ROM is a rebadged version of Mr Micro's *Punchy*, which features *Punch & Judy*'s loading screen and credits Clockwize. There's no MSX in our office, so we can't see if physical versions are the same (we suspect so) or if this is some weird ROM mix-up.

Commodore 1541 Fact

■ If you needed to change the drive number of a Commodore 1541, for use in multiple-drive systems, the instruction manual provided both a software method and a hardware method – the latter requiring you to open up the drive and physically cut jumpers.

ESSENTIAL GAME

Little Computer People



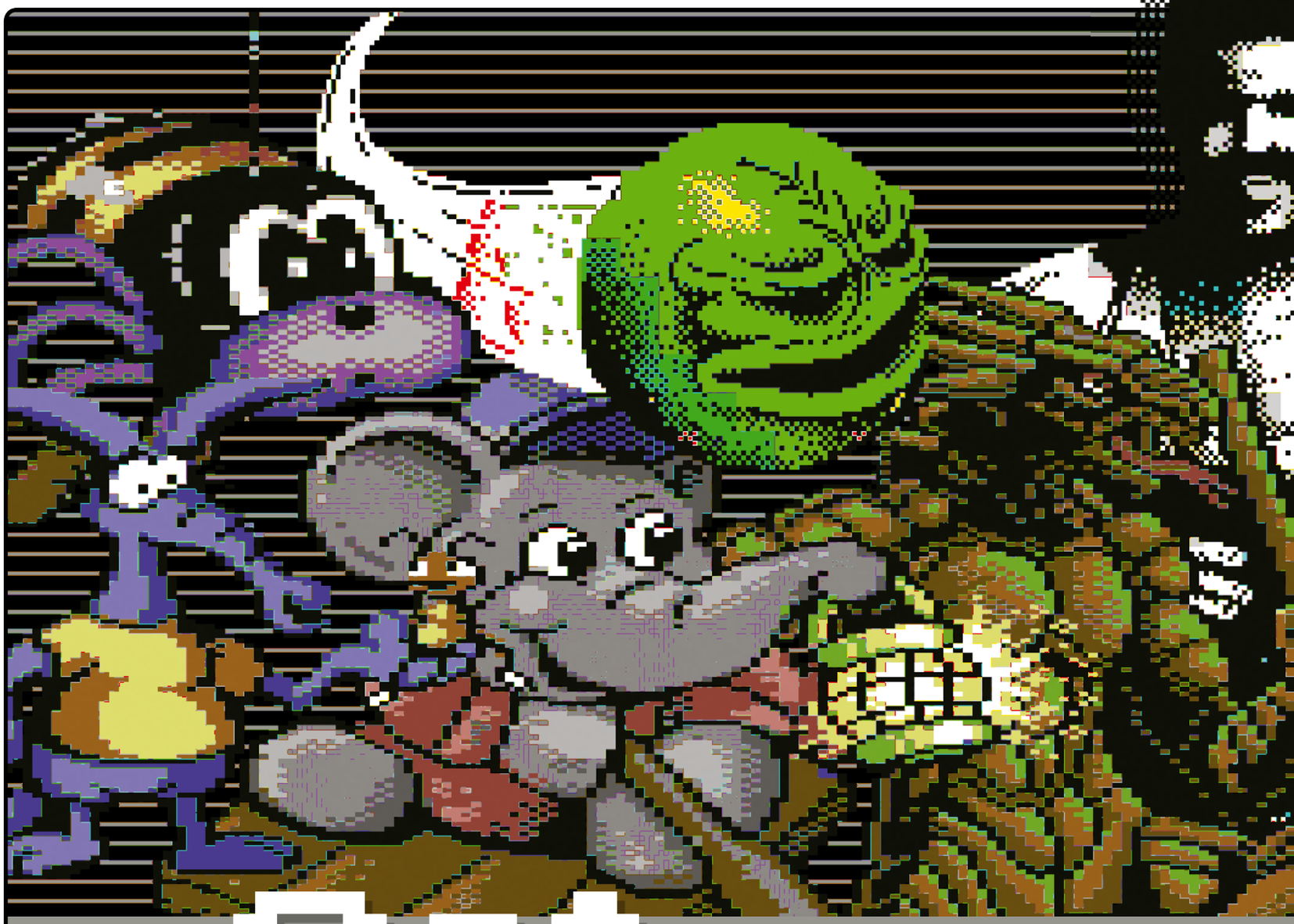
Not every storage medium decision comes down to loading speed – some Commodore 64 games are limited on tape when compared to their disk versions, and this early example of a life simulator happens to be one of them. If you don't play the disk version, you'll be missing out on a persistent character, the little games you can play such as *Poker*, and more meaningful communication. Other games that benefit from using the 1541 drive are ones which require multiloading on tape, as the process is not only faster, but very helpfully automated when playing a disk version.

Commodore 1541

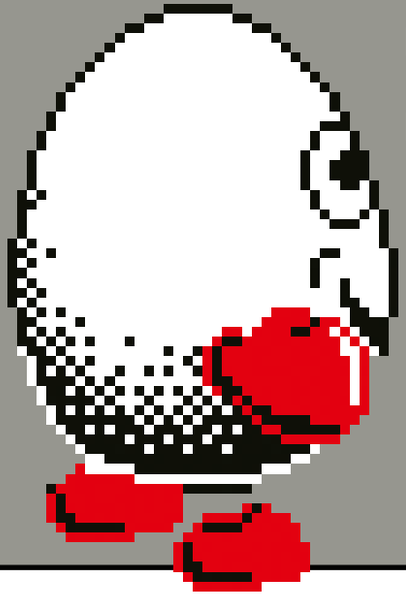
» **RELEASED:** 1982 » **PLATFORM:** COMMODORE 64 » **COST:** $400 (LAUNCH), £35 (NOW)

When looking back at the history of the Commodore 64, it's not hard to see why cassette tapes became the dominant storage media for the system in this region. Commodore's default disk drive, the 1541, was akin to a tank – bulky, expensive, heavy and slow. The single-sided drive accepted 5.25-inch floppy disks, and contained both Commodore DOS 2.6 and a MOS 6502 CPU to run it. However, the drive was initially hamstrung by supply problems caused by high defect rates. Worse yet, due to hardware problems relating to Commodore's desire for the C64 to be compatible with the 1540 disk drive, Commodore DOS transfers just 512 bytes per second – barely faster than the Datasette.

Reliability problems were ultimately fixed with the adoption of a new drive mechanism manufacturer. What's more, the drive has the capacity to receive new firmware without any permanent modifications, either via type-in code or through ROM cartridge. As a result, it was possible to drastically increase the speed of data transfer – Epyx's FastLoad cartridge could manage up to five times the drive's regular speed. Without such tools, the drive design wouldn't have stuck around , but it was made available in revised forms for the duration of the C64's life, first as the 1541C and later the 1541-II.



The Art of the 8-bit Loading Screen



Back in the 8-bit era, loading screens were a chance for artists to let their creativity run wild – so long as the computer was able to keep up. We've gathered a selection of artists to find out how these iconic images came to be…

Words by Nick Thorpe

This might sound a little strange to those readers who have always been accustomed to the instant gratification of cartridge games, but we can't help feeling sorry for players who haven't spent a significant amount of time loading games from cassette. There's just a certain ritualistic pleasure that comes with those old magnetic tapes – making sure they have been fully rewound, entering the loading command, the optional trip to the kitchen to grab a snack or hot drink, and then that glorious moment where the first row of graphical data is drawn to the screen.

Loading screens were an important fixed point of any 8-bit computer game. They were the first thing that anyone would see of a game, and since the program still hadn't fully loaded, you'd be looking at them for at least a little while. Some of them were of little note, but the best remain stuck in our memories to this day. "It has to reflect the game and give you an indication of what you are expecting," says Shaun McClure, a veteran ZX Spectrum artist. Bill Harbison agrees, adding that a good loading screen "should also be interesting enough to withstand multiple viewings as it will be on the TV screen for a long time".

Yet, for publishers, loading screens were often at the bottom of the priority list. "The loading screen was usually the last thing to be done and because of that they had to be completed as soon as possible, normally three to four days," says Bill. Ste Pickford, who created loading screens across the ZX Spectrum, Amstrad CPC and Commodore 64, has similar memories. "Typically you'd get a request from the boss along the lines of, 'Shit, we need a loading screen for tomorrow, can you do it?' That was it, so I had to come up with an idea, and implement it, usually just in a day or two, while the programmer was frantically trying to finish the game a couple of desks over." ▶

» [C64] Sometimes, you don't need to pack every colour on screen – you just use the ones you have wisely.

» [Amstrad CPC] Though based off preexisting artwork, *Gryzor*'s loading screen shows the Amstrad at its best.

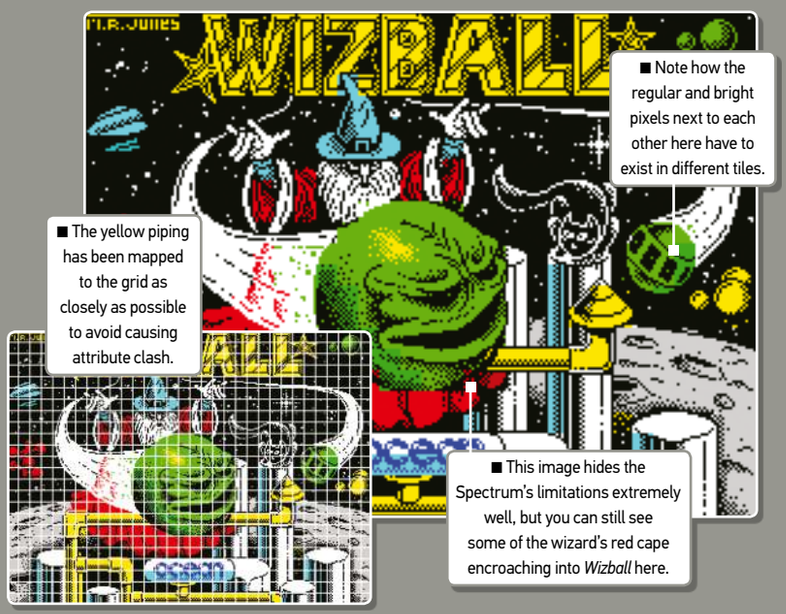
» Ste Pickford was a whizz on the Amstrad, creating great pieces of art.

CHOOSE YOUR CANVAS

Every computer has different graphical capabilities – here are the limitations artists had to work with

ZX SPECTRUM

- 256x192 resolution
- Square pixels
- 15-colour palette
- Each 8x8 pixel tile can contain up to two colours
- Every pairing is defined on a case-by-case basis
- Whole tiles must be set as regular or bright, so regular and bright shades can't coexist in the same tile



■ Note how the regular and bright pixels next to each other here have to exist in different tiles.

■ The yellow piping has been mapped to the grid as closely as possible to avoid causing attribute clash.

■ This image hides the Spectrum's limitations extremely well, but you can still see some of the wizard's red cape encroaching into *Wizball* here.

■ The rainbow here couldn't have been any smaller, as lots of tiles already hit the four colour maximum.

■ This image uses colour exceptionally well, putting almost the entire C64 palette on screen in one go.

■ We can tell the background colour is black because every four-colour tile uses it. This makes sense, as it's an outline colour.

COMMODORE 64

- 320x200 resolution
- Double-wide pixels
- 16 colour palette
- Each 8x8 tile contains up to four colours
- Three colours are defined on a case-by-case basis, with one background colour shared across all tiles

AMSTRAD CPC

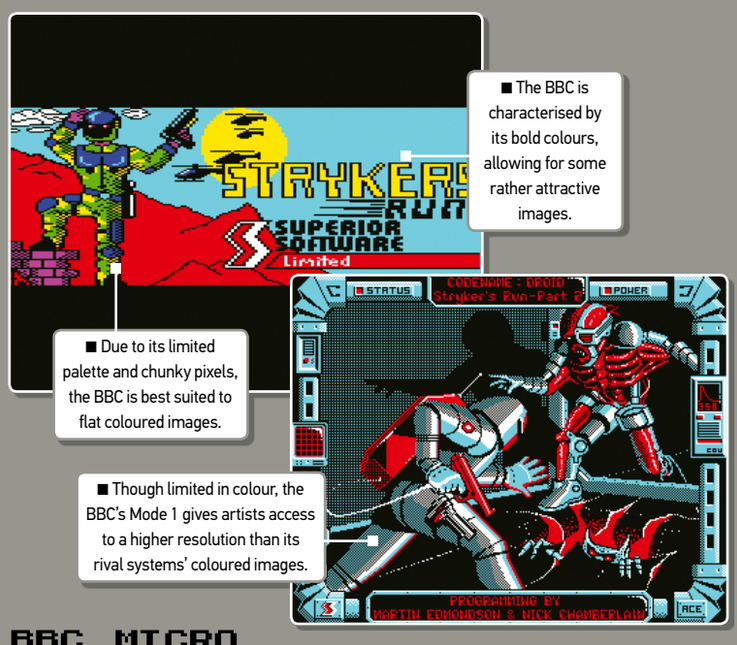
Mode 0:
- 320x200 resolution
- Double-wide pixels
- 27-colour palette
- Each 8x8 tile contains up to 16 colours:
- All colours shared across all tiles

Or **Mode 1:**
- 320x200 resolution
- Square pixels
- 27-colour palette
- Each 8x8 tile contains up to four colours:
- All colours shared across all tiles

■ The Amstrad is great at still images in **Mode 0**, with vibrant colours and a relatively large palette.

■ You can technically use every one of your 16 chosen colours in a tile, but the need for that is rare. Some tiles here do use six colours, though.

■ **Mode 1** has a less blocky look thanks to its square pixels, but the colour reduction is very severe.



■ The BBC is characterised by its bold colours, allowing for some rather attractive images.

■ Due to its limited palette and chunky pixels, the BBC is best suited to flat coloured images.

■ Though limited in colour, the BBC's Mode 1 gives artists access to a higher resolution than its rival systems' coloured images.

BBC MICRO

Mode 2:
- 320x256 resolution
- Double-wide pixels
- Eight colour palette
- Each 8x8 tile contains up to eight colours:
- Rapidly flashing pairs of colours are available to simulate further colours

Or **Mode 1:**
- 320x256 resolution
- Square pixels
- Eight colour palette
- Each 8x8 tile contains up to four colours:
- Rapidly flashing pairs of colours are available to simulate further colours

> **"There was no internet back then so I couldn't just search for an image online"**
> Bill Harbison

With a relatively casual attitude towards having loading screens done at all, you won't be surprised to find that artistic direction was often thin on the ground. "That was why doing loading screens was so much fun – you were just left to it," says Ste. "We never even saw the cover art for the games until after they were released. We weren't honoured enough to be shown cover art in advance, and we certainly weren't consulted on cover art (even when we'd created and designed the game from scratch)," he explains. "As far as we, the devs, were concerned, nothing existed outside of the game itself."

As a result, Ste would take creative licence to produce his own take on the concept. "For games like *Feud* or *Zub* or *Amaurote* I was trying to create something that would work as a cover design, imagining I was the cover artist. For some of the earlier ones I did, like *Omega Mission* or *Glass*, I was just trying to capture the feel or mood of the game, as best I could in one or two days." One of Ste's better-known games did have something to work from, though. "*Ghosts 'N' Goblins* was an existing arcade game, and I found some art from Capcom (although I didn't think it was provided to me – I think I found it myself) which I based the loading screen on."

» [C64] The Commodore's earthy tones were perfect for a down-and-dirty hack-and-slash like *Rastan*.

For Bill, the level of initial input varied. "On *Daley Thompson* and *Robocop*, I was given a raw image digitised with a video camera as a template to which I added colour and shading. With *Chase HQ* I think I got an early black and white photocopy of Bob Wakelin's unfinished cover art, but for *Wec Le Mans* I had nothing," he explains. "I had to create a loading screen in a few days with zero reference. Of course, there was no internet back then so I couldn't just search for an image online, in those days you either had to buy a book with some good pictures or go to the library. I didn't have the time to do either."

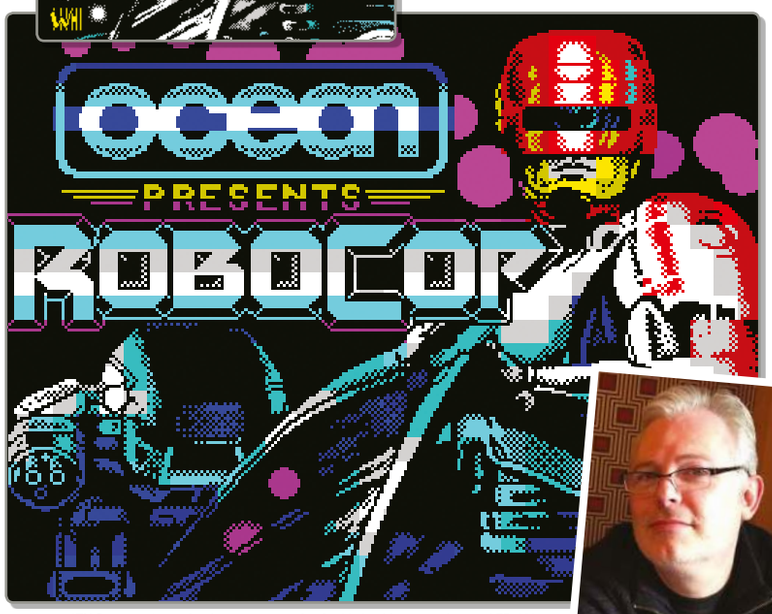
"I sort of started in the industry by working for a company called D&H Games in Stevenage – and they were lovely," says Shaun. "I sent them some pathetic cover tape of my *Zenobi* art and told them that I could do… I think I quoted '£10 for black and white and £15 for colour' – or something ridiculous – and told them I didn't even have a bank account and could they pay me in cash?" This was bold, but it paid off. "I was a little kid still at school growing up in Yorkshire and – fuck me – they sent me £60 in cash in an envelope, told me that they paid £20 for colour ones and that's all they were interested in."

"I forget the games that I did for them for that – there was three of them, but D&H had so many games that were either football related or sports – sorts of all melts into your mind after a while!" The subject matter made it easy for Shaun to find inspiration. "I did a ton of work for D&H and I just got a title to use – and I wasn't a football fan at the time, so I'd just look at the national papers and get a good shot of someone scoring a goal or something. Trace that – Bob's your uncle!" As times moved on, things changed. "Later, it was basically just the box artwork and you'd feel better for it – no chance to mess it up."

For Knights Of Bytes, an adaptation of the cover art was the basis for the loading art in the excellent modern C64 platformer *Sam's Journey*. "The cover art was drawn first as a high resolution hand-drawn picture. Hence, it was the source of all subsequent drawings," explains Chester Kollschen, the game's programmer. "The cover art was in the portrait orientation, whereas the title picture for the C64 game needed to be landscape, so we chose a good region of the cover art and used it as the template for the C64 title picture."

Of course, knowing what to draw was only half the battle – actually getting the idea on the screen was also tricky, and as with any artistic endeavour, the process differs from artist to artist.

» [ZX Spectrum] It's been 30 years since Bill Harbison drew this iconic loading screen…



» [ZX Spectrum] …so he drew a new version for 2018, with more colour and ED-209.

» Bill Harbison made numerous loading screens for Ocean, including *Robocop*.

DEADLY DEADLINE

Ste Pickford recalls the perils of a last-minute change of plans

"The one change was with our game *Zub* – or *Zob* as it was originally called. Just after we'd finished the game and were about to send it for duplication, our boss got a frantic call from the head of Mastertronic. They'd just had an embarrassing meeting with their French distributors, who were horrified because *Zob* was French slang for 'penis' apparently. We had to change the title in about 30 minutes, as the bike courier was on his way to pick up the master copy. So I had to frantically change the top of the O on the loading screen to be a U. On the in-game intro sequence in the 128k Spectrum version of the game we only had time to drop a solid black attribute square over the top of the O, rather than redraw it."

» [Amstrad CPC] After a name change at the 11th hour, it was a race against time to quickly alter *Zub*'s loading screen into something less phallic.

Q&A: JONATHAN TEMPLES

We speak to the artist behind a variety of classic C64 loading screens

» [ZX Spectrum] Shaun's *Lords Of Chaos* screen is a masterclass in minimising attribute clash.

» Jonathan Temples (left) specialised with C64 loading screens, while Shaun McClure (right) favoured the Spectrum.

When you were designing loading screens, what was your process? Did you sketch them out on paper first, or go straight to screen?
I would sketch roughs on paper experimenting on compositions. I then used my NEOS mouse and programme on the Commodore 64 'mouse and cheese'.

How much reference material did you have to work with?
I would be near the end of the main game graphics maybe working on last level sprites and background level maps. That would mean I would have a good grasp on the main elements of the game to create a loading screen with impact. Sometimes the games companies would send me concept art of the game, like with *Wrestling Superstars* where I was told, 'Just copy the game cover the best you can.'

How long did it typically take to draw a loading screen?
I could spend a day creating it, but I kept going back to it until the game was finished, ready to be supplied to the games company.

How hard was it to work with the C64's colour restrictions?
That's the amazing thing about the Commodore 64's limited 16 colours. It made you a better artist, as it pushed you to do things like mix colour combos and pixel shading to get the max out of the graphics and colours.

Were there any C64 artists whose work you admired?
My main graphic artist heroes as a young teenager on the Commodore 64 were Dok and Bob Stevenson.

» [C64] Jonathan was told to just simply try and replicate the box art for *Wrestling Superstars* as best he could.

» [C64] Chester notes this loading screen as a C64 favourite, and the detail makes it easy to see why.

▶ Occasionally, things began off-screen. "I used to draw things in clear acetate and then stick that with Sellotape to the actual TV screen (yes we used those – I had a little portable TV set)," says Shaun. "Then the hard part. I would have to draw the images in red pen (that was important) to the screen, and then sit there rigidly so I could see the image over the screen and trace under it with the little pixel cursor. I used something called Melbourne Draw – and that was a key to doing great art – because you could press G and get a black and white grid of the attributes on the screen in each 8x8 boundary."

Melbourne Draw was a popular tool with ZX Spectrum artists, to the point that Ocean even used a modified internal version known as Ocean Draw. "Basically, once you made the image, you could zoom in too and sort out any problems with colour clash – [it] usually loads, as you would imagine," says Shaun, explaining its advantages. "But it taught me techniques such as using stippling to hide areas that we did get large amounts of colour clash or indeed – add more 'colour' (interim shading)."

For Bill, everything is done straight to digital. "If I'm not working on a predigitised screen I usually start sketching on the computer," he says. "Once I've got an idea of where the picture elements should be I then start adding colour and work out where to add masking to hide the attribute clash." Bill's one major bugbear is a common one, too: "The main limitation was plotting pixels on the screen with just the rubber-keyed Spectrum. When I was drawing some new screens in Photoshop recently I was shocked that I would have had the patience to draw an entire screen without a mouse."

Ste worked very differently in the Eighties to today. "I'm embarrassed to admit it now, but I think I just started drawing in pixels on the screen. I guess I was young and enthusiastic! I don't do any work now without lots of sketching and roughing out first on paper, but I hardly ever did any planning back then," he admits. "This was crazy really, as none of the art packages had the ability to cut and paste. If you drew something in the wrong position on the screen – if something was eight pixels too far to the right, you couldn't grab it and move it left by eight pixels, like you can in any modern art package. You had to redraw every single pixel again eight pixels further left, then delete the originals."

Working across multiple formats, Ste found that he usually had to prioritise formats based on deadlines, and would often only have time to draw one version, with others converted by a coder. There was a notable exception, however: "On *Feud* I did different loading screens for the Spectrum and Amstrad versions. This wasn't requested by the studio, this was just me showing off, and trying the elevate the game to be a bit more than just a project finished as quickly as possible, which was all the boss wanted. I deliberately did the Amstrad screen first using colours in such a way that it could not be converted to the Spectrum, then I had a justification for spending extra time designing a completely new Spectrum loading screen."

Ste also had the ability to play favourites. "I enjoyed the Amstrad the most. Partly because there was no attribute clash to worry about, and you had a nice set of colours to use. And partly because the Amstrad came with its own nice monitor, which was nice and clear, whereas on the Spectrum or C64 I was using a 14-inch TV with RF input, and the picture was painful on the eyes." The Commodore 64 earned his ire, however. "I generally hated working on the C64. All the graphics packages were garbage, and you had to draw with a joystick, which was a nightmare."

The Knights Of Bytes team didn't have that problem – but then, they were able to take advantage of sophisticated digital art tools that weren't available in the Eighties. However, they did choose to use a regular C64 graphics mode for *Sam's Journey*, which proved to be a limiting factor. "There are ways to increase the C64 graphic display capabilities, often shown in demos. But for *Sam's Journey*, we opted for a 'classic' C64 multicolour bitmap picture without any additions," explains Chester. This meant severe colour restrictions, as only three colours could be chosen per 8x8 tiles. "The way the classic graphics chip produces the picture, graphic artists have to put some thoughts in the colour model before even starting to set pixels in the canvas." Could this be mitigated by aligning elements to the grid of 8x8 tiles? "Yes, but that's almost impossible

> **"I generally hated working on the C64. All the graphics packages were garbage"**
> Ste Pickford

to do with a natural scene such as a picture." The result is that a lot of editing is required to get an optimal image.

Bill found himself in the same editing predicament with *Daley Thompson's Olympic Challenge* – an impressively shaded image. "I was given a crude digitised picture taken with a video camera and had to tidy it up and add colour and detail," he explains. "There was quite a lot of 'tidying' required so I had to stipple the pixels and make them look like the shading was becoming lighter and darker. There were also a lot of stray pixels that needed deleting."

Though these screens usually took a few days at most to create, they've remained in players' memories for decades – and each of our interviewees had their own favourites in the wider world. Shaun has a number of favourites. "Where do I start? Anything that Ultimate [did], plus anything David Thorpe did – Simon Butler was good, too – Martin Wheeler had his moments. Ste Pickford? All really good!" For Ste himself, it's another one of our interviewees who proves memorable. "There were loads that were way better than mine, but I'm terrible at remembering names, so I can't namecheck anyone unfortunately. Actually, Bill Harbison did some ace work at Ocean on the Spectrum."

"The loading picture of *Rainbow Island* on the C64 did impress me as it also managed to show many details despite the overall low resolution," explains Chester. "Although *Rainbow Island* is not the newest title, its picture came to me first. But there are many others as well. *Grand Monster Slam* had a very good picture, too, although I never really got a grip with the game itself." Bill looks to one of the early Spectrum artists: "Like most people I was greatly inspired by the work of FD Thorpe. The screens for *Pogo*, *Spy Hunter*, and *Eskimo Eddie* were particularly inspiring with his use of colour and detail. He set the bar to almost impossible heights not only with his quality of work but also the amount of screens in his portfolio. I still think he's the king on the ZX Spectrum."

It's been said that restrictions breed creativity, and 8-bit loading screen art will forever be a great example of that. When machines struggled to even do so much as display a full-screen colour image, one set of skills wasn't enough – artistic skill and technical knowledge were both key to creating a great loading screen. As computers have become more powerful and the restrictions were lifted, that intersection of skills has become a little redundant. Of course, iconic loading screens didn't disappear at the end of the 8-bit era, but that's a story for another time. For now, just get a cup of tea, put on a great 8-bit game and take the time to admire its loading screen. Hopefully, you'll see it in a whole new light. *

» [Amstrad CPC] While it doesn't represent the in-game action, *Prince Of Persia*'s loading screen sets the scene well.

» [Amstrad CPC] The snow-covered streets of Moscow look lovely here – shame you're about to bomb them…

JOURNEY TO THE SCREEN

Knights Of Bytes used modern techniques to create the impressive Sam's Journey loading image

01 Black and white line art is created using a modern Linux PC and a Wacom tablet. "The outlines did take most of the time. But that's not surprising. They are made for the entire cover art in 600dpi in great detail," explains Chester Kollschen. The full image is portrait, but we're just showing the C64 screen area.

02 The monochromatic image is then digitally coloured, again using a modern computer and art software. "The colourisation happened quite fast," Chester remembers. "Stefan Gutsch [the artist of Knights Of Bytes] said that colorisation and shading is easy if you already have the structure of your picture."

03 Using an art package, the image is reduced to the C64's 16-colour palette. However, peripheral characters need to be removed as they're only partially visible. Additionally, this image actually isn't possible on a real machine – some 8x8 blocks on the screen contain too many colours.

04 After many hours of editing by hand, the image is complete. "There was some cursing involved," admits Chester, who also notes the natural appearance of the image: "There haven't been any grid alignments in the *Sam's Journey* title picture. It's more a clever way of selecting the three colours per cell."

THE MAKING OF THRUST

IN THE KNOW

» **PUBLISHER:** FIREBIRD

» **DEVELOPER:** DAVE LOWE

» **RELEASED:** 1986

» **PLATFORM:** ZX SPECTRUM

» **GENRE:** SHOOT-'EM-UP

THRUST PROVIDED A CHALLENGE FOR MANY GAMERS, WITH ITS GRAVITY AND INERTIA CONTROLS LEAVING MANY SPINNING AND CRASHING INTO CAVES. DID DAVE LOWE SUFFER THE SAME FATE WHEN HE WAS ASKED TO CONVERT IT FOR THE ZX SPECTRUM?

Words by Paul Davies

More renowned for composing music rather than coding games, you may be surprised to find that Dave Lowe was approached to take on the project of converting *Thrust* to the ZX Spectrum. But having already produced *Buggy Blast* for Firebird, he was the first port of call by them for the conversion.

"Firebird came to me with the conversion about six weeks before I was due to move house, and they needed the game completed in four weeks," Dave says. "I took a few days to decide whether to do it or not, as I could see that it required some maths and I was not sure if my house move would allow me to meet their deadline. But as is the life of a musician – the money won out."

» [ZX Spectrum] Hmm, orb or fuel? Deciding which to take first could be crucial.

Admitting to not being much of a gamer, Dave's interest was more in the challenge of coding, and given the complexity and originality of *Thrust* this no doubt added a little extra to the appeal of taking the job on. "A lot of games seemed to regurgitate the same concept and just dress it up with fancy graphics and sound," explains Dave, "but I was fascinated with *Thrust*, as it was the actual concept behind it that gave the game its playability and sustainability."

Thrust puts you in control of a ship where your mission is to navigate your way through maze-like caverns to retrieve an orb, which you pick up via cable, and then make your way out before blasting off into space. A simple concept, in theory, but not only do you have to control your speed, you also need to take into consideration the effect such speed will have on your ship as you battle to bring it under control – lose control of your orb and you lose stability of your ship. On top of battling with gravity and inertia you're also up against mounted guns as they aim to take you down. Your control options are limited, too, with the ability to only rotate left or right and 'thrust' to push you forward, you may well find stopping mid-flight a bit of problem. Could this game be any harder? Yes, of course it could; you have to keep an eye on your fuel level, too.

» [ZX Spectrum] Plenty of fuel here. Unfortunately, there's plenty of guns, too.

Under the constant pull from different forces, *Thrust* is very tricky indeed; though that's maybe not the case for everyone. Dave recalls, "I must say that I played it so much during the development while tweaking stuff, that I was able to complete the whole game without cheating; though I did build a backdoor into the game that allowed me to have infinite lives and the ability to start on any level as I needed to do that to complete the coding." If anyone has looked or is indeed now planning to look for this backdoor, Dave confirms that he left this in the final version of the game. After all these years, how does he fair at the game now? "I downloaded a Speccy emulator to play *Thrust* again," says Dave. "I found that after all these years, with a bit of practice, I could still reach the end level and complete the game. There are little tricks to every level

» [ZX Spectrum] This thing is heavier than it looks. Best not drop it.

"I FOUND THAT AFTER ALL THESE YEARS, WITH A BIT OF PRACTICE, I COULD STILL REACH THE END LEVEL"

Dave Lowe

in the manoeuvring of the ship and taking out the cannons that when you learn them, enable you to beat it."

Getting the physics just right on a game like *Thrust* would no doubt leave a lot of programmers scratching their heads; this is something that Dave could empathise with. "I actually spent a lot of the four weeks just figuring out the maths side of the game, as I knew it had to be correct to get the playability correct." Dave continues, "Once I had all the gravity and inertia working on the ship, I was still stumped for a while as to how the ship's inertia was transferred to the orb when it was being carried. I could see that it wasn't just a case of applying the same gravity and inertia that controlled the ship to the orb, as the inertia built up by the orb also affected the ship."

So how did Dave finally crack it? "I was actually messing around with a knitting needle with a cork on the end," he explains. "I was trying to simulate it in my head and then it clicked; there was in fact only one set of maths that needed to be applied to both objects. The forces that were applied to the ship were applied at its centre of gravity as it rotated around the 360 degrees; when it picked up the orb, the centre of gravity moved to a point along the connecting beam. This effectively made them one object as its position on the beam defined the weight of the orb."

Thrust was almost completed as a one-man job, with Dave taking on the game development entirely by himself, though he does divulge that a lot of the screen layout on the different levels was actually mapped by his wife Victoria, who happened to be a dab hand at the game. "She could play it all the way through on the C64," says Dave, "making it possible to see the actual map configuration of the levels."

After a solid four weeks of coding on such a tough game like *Thrust*, was there anything Dave learned from the experience? "I learnt the hardest and most important lesson in programming: when the code crashes and wipes your hard disk, it is only doing what you, the programmer, told it to do." *

CONVERSION CAPERS

BBC MICRO

■ Where it all started – this is the original version of the game of which others were based. Its looks may be simple, as is the case with the conversions, but this is the version that had people tied to their chairs, and no doubt also had people furiously jumping out of them, as they watched their ship helplessly spin and shatter into pieces over and over again.

ATARI 8-BIT

■ A solid port but with slightly cruder graphics, the Atari 800 handled the conversion well but has the look of a game that could have been handled slightly better. If you're looking for a version that maintains the playability but has a slightly different look – here's your best bet.

COMMODORE 64

■ Another version here which featured the musical stylings of Rob Hubbard as per its Atari ST counterpart. A brilliant conversion here as you may expect from a computer of the C64's standing. Very smooth and slick, this is one of the best versions of the game out there.

AMSTRAD CPC

■ Similar to that of the original BBC version, the Amstrad incarnation holds up well and is up there with the better versions of the game. All the original elements remain and make it one of the best to play. If you don't have the BBC version then this is the closest you'll get to it.

ACORN ELECTRON

■ Due to its hardware limitations, the Acorn Electron version only ran in two-colour mode, though this is still a solid conversion which runs rather smoothly. In fact, the colour limitation actually adds to the atmosphere and the stark contrast between the green and black, gives everything a nice crisp and clean look.

THE HISTORY OF

Real

Sports

ONE OF THE BIGGEST SELLING POINTS OF THE INTELLIVISION OVER THE ATARI 2600 WAS THE QUALITY OF ITS SPORTS GAMES. THE INTRODUCTION OF THE REALSPORTS SERIES HELPED LEVEL THE PLAYING FIELD AND WE DISCOVER JUST HOW THAT CAME ABOUT

Words by Kieren Hawken

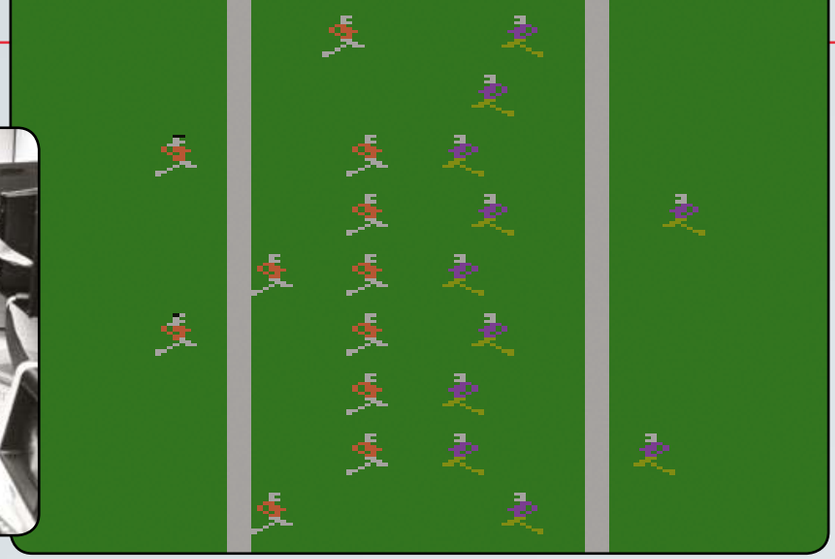
In 1979 the very first console war was started as Mattel's Intellivision went head-on with the market leading Atari 2600. People might not remember this battle as well as Mega Drive vs SNES, or Spectrum vs C64, but make no mistake this was an aggressive fight. One that eventually saw a clear winner, and believe it or not, sports games were at the very forefront of it all. The early sports-based games for the-then Atari VCS were very simple affairs that bore little resemblance to the pastimes they were based on. Games such as *Homerun*, *Football*, *Pele Soccer* and *Golf* had sold well but were no substitute for the real thing. The management at Mattel knew this too, and it felt that the increased power of its system could provide the sporting experiences that everyone craved. So Mattel set about creating a sub-label that it would call *Sports Network*, to specialise in this field, thus creating the first videogame sporting franchise. But it didn't just knock out more realistic sports games, it also attached licenses to them to add more legitimacy. Rather than just plain old *Soccer* Mattel had *NASL*, licensed from the North American Soccer League. It also had *NBA Basketball*, *Major League Baseball*, *US Team Skiing*, *NHL Hockey* and many more. Former Intellivision president and leader of the famous Blue Sky Rangers Keith Robinson, who sadly passed away in 2017, had previously talked about this with us. "There's no doubt about it, these were the games that sold our console," he said. "Our TV adverts made the 2600 look laughable in comparisons. It was very clever marketing and established the Intellivision [as] the serious sports game machine." Keith was right, too, as *Major League Baseball* tops the charts as the system's bestselling game of all time, no mean feat for a sports title.

» [Atari 2600] Part of the Atari's 2600 original sports lineup, *Football* was widely mocked among the senior coders at Atari and it's easy to see why.

» Designer of *RealSports Volleyball* Bob Polaro is a regular visitor of US gaming expos.

Talking of those TV adverts, they soon became the key for Mattel, mainly thanks to hiring George Plimpton to front them. For those unaware of his work, George was a writer, actor, journalist, keen amateur sportsman and, most importantly, a sports commentator. He was highly respected in his field and very much seen as an authority on all things sporting. In these ▶

» Jim Huether proudly shows off his Atari 5200 version of *RealSports Football* to Steven Spielberg and the top bosses at Atari.



» [Atari 2600] The mock-up of *RealSports Football* that Rob Zdybel produced for the 2600 had more sprites on screen than was possible.

RealSports checklist

Which sport appeared on which system

Game	Atari 2600	Atari 5200	Atari 8-bit	Atari 7800
Baseball	Yes	Yes	Yes	Yes
Football	Yes	Yes	Yes	No
Tennis	Yes	Yes	Yes	No
Volleyball	Yes	No	No	No
Soccer	Yes	Yes	Yes	No
Basketball	Yes	Yes	Yes	No
Boxing	Yes	No	No	No

Yes = Unreleased commercially but complete prototype leaked in more recent years.

short pieces of film he briefly compared, like for like, games on the Atari 2600 and Intellivision, not just telling you how superior Mattel's games were but also showing you. Images of George along with his words would also be reused in magazine adverts. There was no escape from Mattel's aggressive advertising. Atari, for the first time in its history, was on the ropes and needed to make a big comeback. So after a meeting of its bosses, the company came up a plan to launch a new sports range of its own. All of the company's existing sports games would be discontinued and replaced with a new lineup of titles, which would be named *RealSports*, and were set to be launched in 1982 for both the rebranded Atari 2600 and its new stablemate the 5200 SuperSystem, as well as Atari's 8-bit home computers.

The first three titles in this series would be recreations of baseball, American football and volleyball. The last of these proved most interesting as not only was it a sport that Atari hadn't covered before, but also one that couldn't be played on the Intellivision either. The developer assigned to this game was Bob Polaro, who had previously programmed the bestselling Atari 2600 port of *Defender*. Bob had already done some work on a volleyball game for the Atari 2600 and remembers when he was asked to resurrect it. "*RealSports Volleyball* was my second

Atari 2600 VS. Intellivision

The 8-bit match day you've all been waiting for, which console will win?

RealSports Soccer VS. NASL Soccer

■ Neither version of the game here has a full complement of players (three versus five) so both lost points there. But the 2600 game doesn't even have goalkeepers so starts to become a bit of a joke. The Intellivision title has a proper pitch, too, which helps!

0 - 1

RealSports Baseball VS. Major League Baseball

■ The Intellivision racks up the points straight away by not only carrying an official licence but by also featuring in-game commentary via the Intellivoice add-on! It wipes the floor with the puny sprites of the Atari 2600 version of *RealSports Baseball*.

0 - 2

RealSports Football VS. NFL Football

■ This is easily the hardest contest of the lot here. Both games feature an incredibly similar look and near-identical gameplay, so it comes down to a few minor features. The 2600 offering just takes the win thanks to better audio and more precise controls.

1 - 2

"I GOT TO DEMONSTRATE IT AND PLAY IT FOR ABOUT 15 MINUTES WITH STEPHEN SPIELBERG WHEN HE CAME TO VISIT, WHICH WAS REALLY COOL!"

Jim Huether

game for the 2600 after *Stunt Cycle*, which was never released for some reason," he explains. "It was just called *Volleyball* originally and I was making good progress with a couple of stick figures bouncing a ball around. But the bosses weren't that impressed and I was asked to drop it to go back to *Stunt Cycle* and convert the game into *Dukes Of Hazard*, which never got released, either! Then the bosses at Atari came up with the whole *RealSports* idea and I was asked to resurrect *Volleyball* again. They wanted me to make several improvements to make it more realistic such as better animation and more colourful backgrounds. They really weren't happy about the square ball in the game though, especially when I told them there was nothing I could do about it!"

Atari's *RealSports Football* was a huge upgrade on the existing football game for the 2600 and was remarkably close to Mattel's own effort. This project was assigned to Atari stalwart Rob Zdybel, and he has a pretty amusing story to share about its development. "I was asked to mock up a screen that would show a football game in progress on the 2600," he says. "They wanted 22 players on the screen which was strictly impossible if the players were to move, but this was just a static screen. I told my boss that, but when she took it upstairs, they were like, 'We love this! We want this football game!' I definitely learned a lesson there!" With the first mock-up of the game out the window, Rob had to try and come up with something that actually worked. He describes this process to us, "I was just trying to be better than the previous football game Atari had made, which was called *Flying Frog Football* around the office because it looked like roadkill was playing the game, the graphics were that bad. That was a pretty easy mark to hit, but I was still happy with the result." The 5200 and Atari 8-bit version of the game was handled by Jim Huether, who's well known for being the face of *Warlords*. He remembers the development period well. "This game took almost a year. It was my first real game on the 5200, and one I had wanted to do ever since I started at Atari," he says. "I remembered that vibrating football game product from when I was kid, and I wanted to make it come alive on a computer. I essentially did this game by myself including the design, the programming, the animations, the sounds and even the draft of the manual! This game used artificial intelligence, so all the players on the field were tasked with roles at the beginning of the play. As the play developed, they would change their roles as necessary, just like in real football. The Stanford football team was hooked on this game, and I got to demonstrate it and play it for about 15 minutes with Stephen Spielberg when he came to visit, which was really cool!"

Without doubt the most talked about game in the series remains *RealSports Baseball*, this is mostly down to the highly accomplished 5200 version than its poor 2600 sibling however. The man behind this game was Keithen Hayenga, a new hire at Atari who would later work on the unreleased 5200 port of *Tempest*. He wasn't even assigned this project originally. "My original assignment was to be a war game called *Fox Fire*, which almost everyone still at Atari had turned it down," he explains. "It was the title of a movie about war games with a *Romeo And Juliet* aspect and the game (and me) were going to be mentioned in the movie as advertising for the game. Neither the movie nor the game was ever finished. Then they needed someone to finish *RealSports Baseball* for the 5200. Jim Andreason had started it right after having done *RealSports Football* and he needed a break. Rather than finish his game I started it all over and got extra ROM space to put in voice, too. Jim did come back to help me finish off the gameplay though. It was awarded the title best sports game of 1983 by *Video Game Update* and best sports game of 1984 by *Electronic Game Player Magazine*, which made me very proud." *RealSports Baseball*, much like its Intellivision counterpart, was very much used to try and help sell the new console featuring heavily in advertising. Atari was banking on this product so much in fact that it cancelled the release of the Atari 8-bit version, which used near-identical code thanks to the two machines sharing the same hardware, in hope that it would sell more 5200 systems. A similar ploy was pulled with the Atari 8-bit version of *RealSports Soccer*, too, for the same reason. Of course, history tells us that this plan very much failed.

» [Atari 2600] The 2600 version *RealSports Baseball* was rereleased late in the system's life as *Super Baseball* with a new title screen and some colour changes.

RealSports Tennis VS. Tennis

■ The Atari 2600 needs a win here to draw level and it delivers in style! *RealSports Tennis* is just a superior game in every single way. The two-player only Intellivision cartridge seems primitive in comparison and is the weakest of Mattel's entries.

2 - 2

RealSports Boxing VS. Boxing

■ So with the scores level it's only right that it comes down to an epic punch-up! *Boxing* was the very last game to be released in the *RealSports* series and it shows with some of the best graphics and sound you'll see in an Atari 2600 sports game.

3 - 2

And the winner is...

Atari 2600

■ Despite an early lead, the Intellivision lost out as the evolution and understanding of the Atari 2600 hardware allowed it to increase the realism greatly from its early sports games. Take that George Plimpton!

Sporting heroes

More popular sporting franchises

THE SIMULATORS

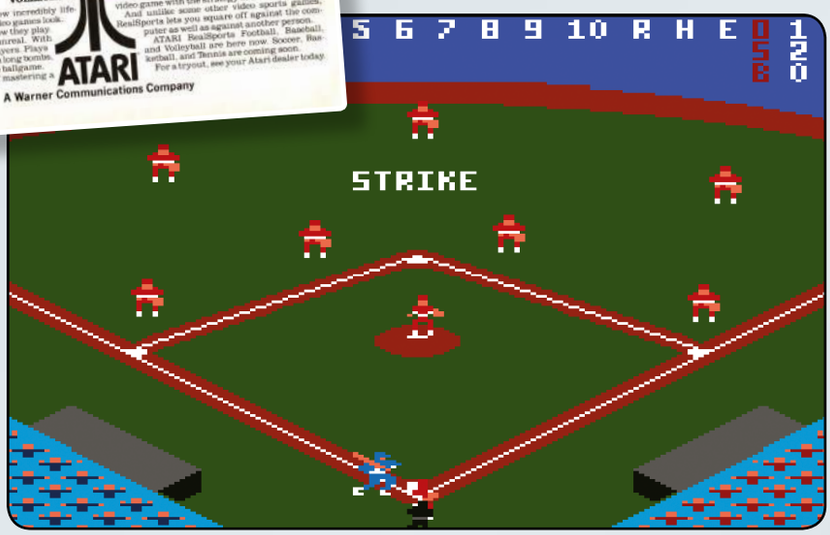
■ Other coders and big-budget studios might have made 'simulator' games too, but it was Codemasters that undoubtedly pioneered them. Highly-enjoyable games such as *BMX Simulator*, *Pro Tennis Simulator*, *ATV Simulator*, *Pro Boxing Simulator* and four *Soccer Simulators* shot to top of the charts and sealed the company's reputation for quality budget offerings.

ACTUA SPORTS

■ In the mid-Nineties the arrival of polygonal 3D graphics saw a huge leap in the realism of sports-based videogames. Gremlin Interactive was one of the first studios to capitalise on this with its *Actua Sports* series. Titles released with this branding included *Actua Soccer*, *Actua Golf*, *Actua Pool* and *Actua Tennis*. However many of these haven't aged particularly well.

THE GAMES

■ Without doubt one of the most popular sports franchises over the years is *The Games* series from Epyx, which we covered in detail way back in issue 149. *Summer Games*, *Winter Games*, *World Games* and *California Games* appeared on a multitude of different platforms and they remain some of the best multiplayer sporting titles out there – particularly *California Games*.



» [Atari 7800] *RealSports Baseball* was the only title in the series to be released for the 7800 ProSystem, sadly it's terrible.

And that leads us on to talk about the European take on football, often named soccer in videogames so it doesn't confuse the inhabitants of North America. This was pencilled in as part of the second phase of *RealSports* games to be released in 1983 along with titles based on tennis and basketball. The Atari 2600 version was programmed by Michael Sierchio, who also worked with Robert Zdybel on the *Muppets* licence *Pigs In Space*, and the Atari 5200 creation was coded by John Seghers, who also did *Gremlins* for the 5200 and Atari 8-bit. Just to add a bit of confusion, *RealSports Soccer* was also renamed *RealSports Football* for the PAL market, although the later red box rerelease returned the name to *Soccer*. Neither version was particularly well-received and definitely missed the mark in terms of recreating the world's most popular sport. On the other hand, however, *RealSports Tennis* was quite the opposite. In fact, the Atari 2600 version could definitely be considered as the pinnacle of the series, introducing never-before-seen features, such as being able to enter your initials (a first for

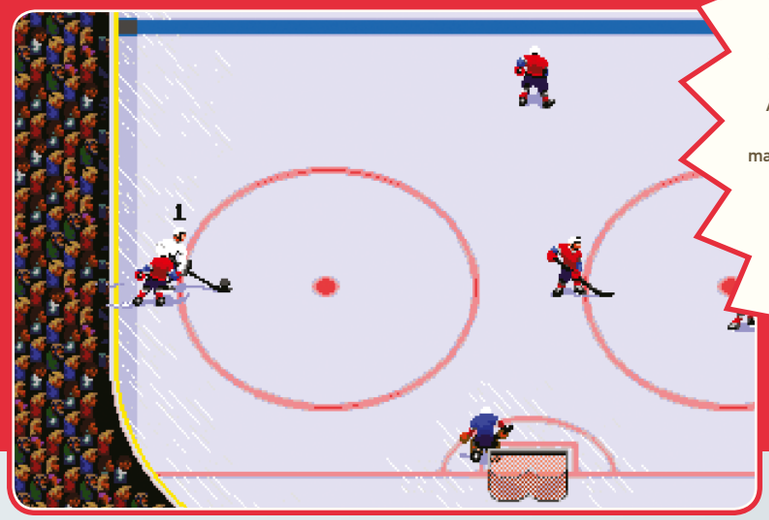
» [Atari 2600] *Title Match Pro Wrestling* for the Atari 2600 is actually a hack of *RealSports Boxing* by original programmer Alex DeMeo.

any Atari 2600 game) and multicoloured sprites. The only previous tennis game for the Atari 2600 was the one by Activision and as good as that was, Atari's game was even better. Sadly, the programmer of this excellent version remains uncredited. The more than competent, although less technically impressive, 5200 and Atari 8-bit versions were handled by W Sean Hennessy who recalls how he landed the project. "Well, I got a call from my old boss at Sega, George Kiss, and he knew that I was a huge tennis fiend and wanted me to come up with a version for their new console," he says. "I was to do the 5200 version first and then port the game to the Atari 800 after. My game was well received and I really enjoyed creating it. After that they let me pick my own projects, I was lucky to be a new guy who actually got given a game he wanted to work on!"

Due to the internal turmoil at Atari, in the wake of the North American videogame crash, no more *RealSports* games were produced under Warner Brothers management, despite the fact big-name sports such as ice hockey, golf and wrestling, had not been covered. However, once the new streamlined Tramiel-owned Atari Corporation started to get software development into full flow it was decided

TV SPORTS

■ This one will be more than familiar to all the Amiga owners out there as Cinemaware's many titles became a staple during the 16-bit years. The main selling point of these titles was the TV-like presentation, hence the name, with cutscenes, commentators, stats displays and scoreboards. Something EA would mimic to great success just a few years later.



The not-so-real sport

When looking at the list of sports covered by the *RealSports* series there is one very notable omission in the form of basketball. One of the most popular sports in America, it's also proved to be a highly lucrative videogame over the years with titles such as *NBA Jam*, *One-on-One* and *Double Dribble*. Atari obviously knew this at the time and did announce *RealSports Basketball* for the Atari 2600, Atari 5200 and Atari 8-bit. Despite being heavily featured in catalogues and advertising, the game never made it out the door. Rumour has it that Atari management simply wasn't happy with how the game turned out and felt that it offered nothing over its rivals and, indeed, previous Atari basketball games.

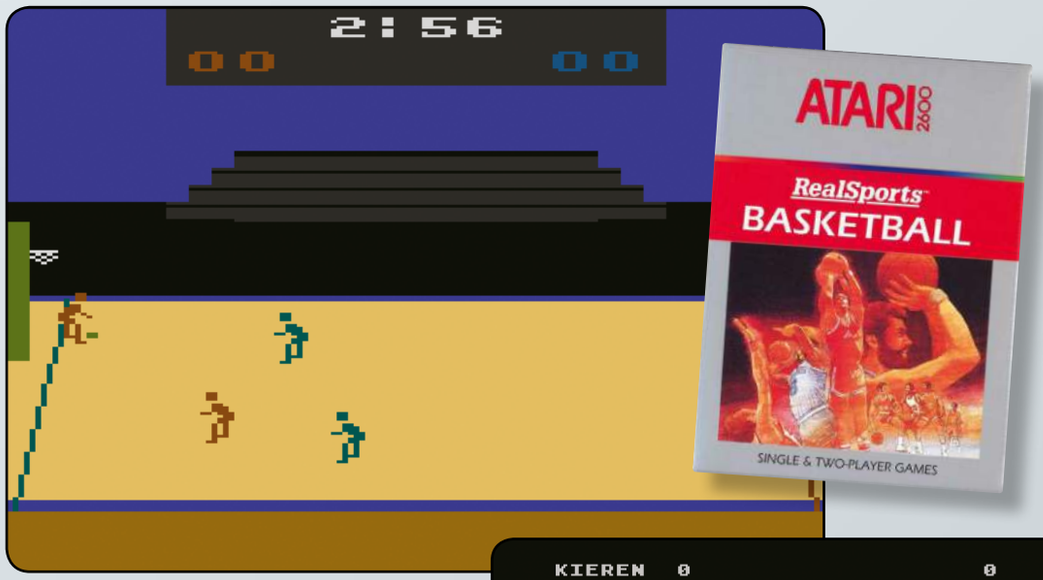
With the Atari 8-bit and Atari 5200 versions, there were actually two attempts, with the first being nothing more than an updated version of Atari's original *Basketball* from 1979. Programmed by Ken Bass, both versions were shared with the public thanks to his brother Ben and reproduction carts have been produced of both the Atari 8-bit/5200 and 2600 iterations so we can all judge the game for ourselves. And we agree with the testers that *RealSports Basketball* needed some huge improvements to compete with other sports titles that were available in 1983.

"IT ONLY TOOK US THREE TO FOUR MONTHS TO TURN A PROJECT AROUND THANKS TO TIME-SAVING ROUTINES PROGRAMMING AIDS THAT HAD BEEN DEVELOPED"

Alex DeMeo

that the *RealSports* brand was to be resurrected for two more titles. The first of these was *RealSports Boxing* for the Atari 2600 in 1987. This was coded by Alex DeMeo, who later reused much of the code to create *Title Match Pro Wrestling* for Absolute Entertainment. This turned out to be a very impressive title for the 2600, really pushing the system to its limits in terms of graphics and sound. This led to it being heavily featured in advertising for the newly designed 2600 Jr console. Alex recalls how much easier it was to produce games for the system in the later years, "Originally it took at least six months to code a 2600 game and it was usually the work of just one programmer. By then it only took us three to four months to turn a project around thanks to time-saving routines and programming aids that had been developed. Additionally, the work was now (usually) divided up among several people with dedicated artists and musicians etc."

The last game in the series was an Atari 7800 port of *RealSports Baseball*, the only game in the franchise released for the ProSystem this didn't hit the market until 1988. Somehow, though, this version managed to be vastly inferior to the Atari 5200 original. The gameplay was very limited, buggy and a poor imitation of the real thing. It was also a clear step down in both the graphics and sound departments, too. This was a sad end to the popular series and one that 7800 fans definitely want to forget about, a system that was sadly neglected when it came to sports games. Despite this disappointing conclusion to the story, the *RealSports* series is still fondly remembered by most Atari fans and the associated games definitely mark an important step in the evolution of sports games. In fact, there are still people out there who regard *RealSports Baseball* on the 5200 as the best pixellated version of the sport in existence! While we wouldn't go that far, it would be wrong to deny its greatness and it's definitely the game most worth revisiting. We would recommend the more recently released Atari 8-bit adaptation, though, so you don't have to use the 5200's awful non-centring joysticks! ✱



» [Atari 2600] *RealSports Basketball* never officially made it to market, however ROMs have surfaced online.

» [Atari 8-bit] Quite surprisingly, there are very few tennis games available for the Atari 8-bit, so the *RealSports* entry is a welcome addition.

SCORE
30

3D Monster Maze

STILL TERRIFYING ME, THREE DECADES ON

» RETROREVIVAL

» ZX81 » MALCOLM EVANS » 1982

I'll never forget my first encounter with Malcolm Evans' epic *3D Monster Maze*. I was playing around a friend's house and he was proudly telling me about his new game and proclaiming to me how amazing it was. Of course, this wasn't the first time that Paul had hoodwinked me with grand claims over a ZX81 game, so my guard was up somewhat. I'd been uninterested with his stories on how lifelike *Chess* was, while *Flight Simulator* was simply too complicated for me to play. So when he earnestly told me that *3D Monster Maze* was the scariest game I would ever play I smiled patiently to myself and simply waited for the game to load up.

Ushering me to have the first go (Paul was nothing if not generous when we played his new games) I found myself in an astonishing-looking 3D maze and I gingerly started to explore it, fully aware that a gigantic dinosaur was trapped somewhere in there with me. There was no sound, but prompts like 'Rex Lies In Wait', 'Rex Has Seen You' or 'Run He Is Behind You' were no less terrifying and I'm not ashamed to say that I squeaked with fright the first time he caught me – I was nine, after all.

Of course, I'm a grown, adult man now. I've played the likes of *Alien: Isolation*, *Amnesia: The Dark Descent*, *Outlast* and various other survival horror games, I'm certainly not going to be frightened of something as basic as *3D Monster Maze*…

"Are you frightened, Darran?" Drew asked me, roughly three minutes into my playthrough after I jerked back in my chair and made a noise not that dissimilar to the one I emitted in 1982. "Did you have a little scare?" He might have been teasing me but he was right. For a brief moment I forgot I was in an office and I was once again that frightened little nine-year-old who had jumped out of his skin thanks to the skill of a developer who was able to turn a bunch of ASCII characters into a ferocious and dangerous T-rex. ✱

GILSO

TIMELINE

1982
- Tim Gilberts phones his father from a ZX Microfair and persuades him to start a business, selling software for the just-announced Spectrum. *Games Tapes 1 & 2*, plus *Life* are Gilsoft's first releases.

1983
- **Tim meets Graeme Yeandle as Gilsoft publishes his adventure, *Time-Line*. Graeme begins work on The Quill, which is released at the end of the year, to great acclaim. In June, Gilsoft attends the seventh ZX Microfair, selling hardware as well as software.**

1984
- The Illustrator is released, giving Quill fans the ability to add graphics. A new office and storage location is purchased in Park Crescent, Barry.

1985
- **Apart from a repackaged Quill/Illustrator combination and a small selection of Quilled adventures, a quiet year for Gilsoft release-wise as Tim focuses on creating the Professional Adventure Writer.**

1987
- *The Quill's* follow-up, The Professional Adventure Writer, is released to great acclaim. Competition is ramping up, though, thanks to Incentive's Graphic Adventure Creator.

1988
- **Gilsoft's final release, QL Notebook, fails to sell many copies thanks to the failure of the Sinclair business machine.**

1989
- Gilsoft officially ends as Tim remains in Spain, working for Aventuras AD.

There's no doubt arcade-style games ruled the roost throughout the life of the 8-bit home computers. Yet there was another genre, one that embraced the technical restrictions of the time, one that required simply a vivid imagination and logical mind in order to enjoy: the text adventure. This was the genre where the player could roam free, solve puzzles, attack enemies and rescue fair damsels; or pilot a spaceship, save a planet and still be home in time for tea. But for Gilsoft, the adventure genre wasn't the start of its story. "I phoned my dad from the Microfair where they announced the ZX Spectrum," remembers Tim Gilberts, cofounder of the company that took its title from his family name. "And he agreed to 'put his money where his mouth was'. I was sure I could write some games for it, having taught myself assembler on the ZX81."

Tim's main hobby throughout the late Seventies and early Eighties was electronics, building computers such as the ZX81 from kit form. "But I loved programming as much as electronics, and that ZX81 came on the family caravan holiday to France, screwed into a plywood base, and attached to a 12V black and white television." As soon as the Gilberts family acquired its first ZX Spectrum, Tim set to work. "The first [program] I think was John Conway's *Life*, using assembler to make it generate several generations a second. I was also determined to do a colour 3D maze game as I loved *3D Monster Maze*." Both games used technical tricks to increase their speed, before Tim was inspired to write a clone of a much-loved arcade classic. "I wrote a version of *Pac-Man*, and I don't think we'd actually sold a copy before Atari wrote us a nice letter," he recalls. Small adverts in the mail order sales sections of several magazines had been spotted by the arcade giant, yet despite this unwanted attention, these adverts were critical for any software house selling its goods via mail order. "Dad used to joke that he had a chart with stars for all the magazines," smiles Tim. "And each time we got an advertising call, he added a star. Magazines with the least stars had an advert the next month."

I'm in the CONTROL ROOM
I can hear the steady beeping of the sonar device. (S,E,W,U)
I can also see:-
SONAR DISPLAY
Tell me what to do.
>RETRO GAMER IS ACE

» [ZX Spectrum] Adventure writer Peter Torrance cut his teeth on Firebird budget adventure *Subsunk* and its sequel, *Seabase Delta*.

» The launch of the ZX Spectrum inspired Tim Gilberts to set up his own company with his family.

Tim was just 17 when the first Gilsoft products began to appear. Initially it was just Tim and Howard, the latter helping out in addition to his day job. It wasn't long before Howard's wife, Pam, was involved too, often helping with the assembly and packing of games. "We also had a lot of help from friends on artwork for both early packaging and loading screens," says Tim, name-checking Steve Harbron and Andy Griffiths for the former and Huw Jones for the latter. And as Gilsoft grew, Tim's school life inevitably suffered, or at least from one point of view. "I didn't think so, but the school did!" he laughs. "As they did not

OFT

IN THE EIGHTIES, HOWARD GILBERTS BEGAN A SIDE-LINE BUSINESS IN LEAGUE WITH SON, TIM, SPURRED ON BY THE LATTER'S ENTHUSIASM FOR THE ZX SPECTRUM. NEVER A BIG PLAYER, BUT FONDLY REMEMBERED TODAY, THIS IS THE STORY OF GILSOFT – WHAT NOW, BRAVE ADVENTURER?

Words by Graeme Mason

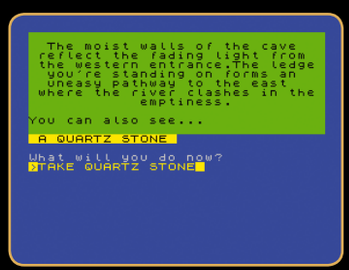
"I WROTE A VERSION OF PACMAN, AND WE HADN'T SOLD A COPY BEFORE ATARI WROTE US A NICE LETTER"

Tim Gilberts

offer A Level computing, I was splitting my time between the comprehensive and college. I think it was after the weekend writing Softlink [a program that Kempston used to adapt games to its joystick interfaces], that I was summoned to school to explain what I was doing when I wasn't there or at college. They felt I was juggling things not conducive to the school goals. So I said, to rapturous applause from the common room, that I was only studying to get a job, and I already had one that was earning plenty. So school was not conducive to me staying!" Working just before his A Levels was not the best timing, and Tim caught up at a later date with his remaining exams. But Gilsoft was keeping him busy in the meantime, and mainly thanks to one soon-to-be-famous utility program that allowed the nation's febrile imagination to finally be set loose.

They say everybody has a good novel in them; maybe the same can be said of adventure games, and in 1983, Gilsoft gave everyone the chance to realise that otherwise distant dream. With Tim's experience of the genre limited, it was left to nearby customer, Graeme Yeandle, to help him create history. "It was an accident of geography; Graeme had bought some games from us by mail order, and when he saw he only lived ten miles away, he came to our house to see them before buying," explains Tim. An eminently sensible approach given the hazards of purchasing games via mail order, and the pair were soon deep in conversation. "He was impressed enough to buy a copy of *3D Maze Of Gold*, and mentioned he'd written an adventure game called *Time-Line*." Interested in putting his own imagination to use, Tim borrowed some of the tools that Graeme had used for *Time-Line* and attempted to write his own adventure game. "But it was fairly laborious, so I suggested he create something that anyone could use." The Quill Adventure System – a program that allowed even the most technically challenged user to create a workable adventure game, was the result, and Gilsoft's breakthrough hit. As *Crash* magazine noted in its review, "The Quill opens up a huge area of complex programming to thousands of people. At £14.95, it is almost ludicrously underpriced for what it does and, more importantly, what it allows others to do."

But before The Quill had even been completed, Tim recognised the significance of the utility. ▶


The moist walls of the cave reflect the fading light from the western entrance.The ledge you're standing on forms an uneasy pathway to the east where the river clashes in the emptiness.
You can also see...
A QUARTZ STONE
What will you do now?
>TAKE QUARTZ STONE

» [ZX Spectrum] A tricky situation in Gilsoft's *The Curse*.

» (Top) Graeme Yeandle and Tim Gilberts proudly displaying their respective creations The Quill and The Illustrator.

"I LOVED SHOWING WHAT WE HAD DONE TO PEOPLE AND CHATTING TO OTHER ENTHUSIASTS"

Tim Gllberts

» An early cover by Steve Harbron… and an even earlier pencil sketch of the same cover.

▶ "We realised how unusual it was, as we weren't aware of anything like it, other than assemblers which helped, but only other programmers." There was a step-up in packaging, as noting the potential retail capacity of the utility, Tim hired a local commercial artist to create a striking black and gold image. "We also had to have a cardboard box to replace the plastic bag, which was driven by retail, who needed eye candy for the shelf." The success of The Quill was virtually instantaneous; now it was possible for programming neophytes to create their own adventures, with only their imagination to limit the result. Conversions to other formats followed, with its author handling the Commodore 64 and Amstrad ports, while Tim took care of the Oric and Atari ports, now focusing full-time on Gilsoft and using The Quill's success to fund future releases. He recalls, "We sold many tens of thousands of copies but even at £14.95 there wasn't a lot of profit, considering up to 70 per cent discount for large wholesalers and retailers, plus the large manual and outer box to produce along with tape duplication."

The main drawback of The Quill was its lack of graphics capability. Graphic adventures, buoyed by the success of games such as *The Hobbit*, were becoming the norm, even by 1984. Tim says, "I had been pondering how we could fit [graphics] into the Spectrum when I realised we would have to store how they were drawn, and that lent itself to a database, and an editor system to be able to amend the drawing." The result was The Illustrator, created by Tim on the ZX Spectrum and Commodore 64, and tailored specifically to run side-by-side with The Quill. By now, games were firmly in the backseat as far as Gilsoft was concerned. "Actually, I think we had always been a bit utility-focused," says Tim, "with programs like CESIL and HAL [two educational languages], The Visual Processor, Softlink, and the Electronics CAD programs from Peter Armitage. Much of it was because I liked creating an effect, like a sprite system, but then turning that into a game seemed less interesting than overcoming the technical challenges." Quilled games appeared rapidly, and Gilsoft, having encouraged them to be submitted, were deluged with efforts from fans. Commercial releases also appeared from other software houses, with CRL and Piranha in particular having decent success, usually adapting the basic Quill engine with Gilsoft's own modification software such as The Press (text compression) and Character (a font mod). Then, after publishing a handful of titles itself Gilsoft turned its attention to a quasi-sequel for the popular utility.

Tim explains, "It seemed logical to draw together the range of programs we had now, The Quill, Illustrator, Patch, Press and Characters into a single tool to simplify things again. It was also the chance to increase the power of the system, and make use of disk units that were appearing." By this point, the Gilsoft boss was busy running the company and supporting its products with help sheets and letters – even running a late-night telephone support line every Tuesday evening. Then, just prior to release of The Quill's follow

THE DNA OF GILSOFT

Elements that defined the 8-bit software house

BEDROOM CODING

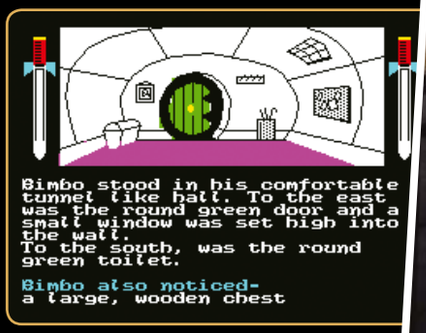
■ Starting in the Gilberts' family home in Barry, South Wales, Tim began by coding assiduously in his bedroom, creating clones such as *Munch Man* and original games such as *Bear Island*. Not quite bedroom to billions, but the start of a decent business.

THIS IS FAMILY (AND FRIENDS)

■ Out of the Gilberts' close-knit community of friends and family, many were enlisted to help out with the various tasks involved in producing software. They pitched in with all sorts of odd jobs including game covers, loading screens, packing, posting and accounts.

THE MOTHER OF INVENTION

■ Gilsoft didn't just make games; it made software that allowed *you* to make games. Inventing fantastical stories is part of any kid's formative years, and Gilsoft made it so that imagination could be harnessed to make compelling adventure games, with little or no programming experience.


Bimbo stood in his comfortable tunnel like hall. To the east was the round green door and a small window was set high into the wall.
To the south, was the round green toilet.
Bimbo also noticed-
a large, wooden chest

» [ZX Spectrum] CRL published a bunch of Delta 4 adventures, including amusing spoofs such as *The Boggit*.

» Pam and Howard Gilberts share a moment. The poster for Activision's conversion of *Rampage*, places this photograph at around 1988.

up, The Professional Adventure Writer (or PAW, for short), Incentive Software unleashed The Graphic Adventure Creator. "That was a surprise," remembers Tim. "We did buy a copy to look at, but I think we decided that the lower amount of memory and more complex programming language wouldn't be too much of a challenge for PAW. I'm sure we discussed that maybe people would buy both anyway and it would only grow the market in general." Unfortunately, while the appetite for creating adventures appeared consistent, public demand, at least in the eyes of software houses, collapsed. By 1987, a year after the release of The Graphic Adventure Creator and PAW, the genre was virtually non-existent, save for output from specialist publishers such as Level 9 and Zenobi, and the odd budget release.

In order to continue and develop more titles, Gilsoft needed to expand. But the rapid change in the market, as 16-bit computers arrived and development costs ballooned, meant Tim could no longer keep its release schedule busy enough to maintain a reasonable income. "I think in 1986 we were still hopeful that recently released products such as QL Quill would begin to increase sales," explains Tim. Of course, that particular horse never really left the stables, and Gilsoft relied on Tim's consulting work for companies such as Konix in order to survive. The Professional Adventure Writer remained a Spectrum/Amstrad exclusive as Commodore 64, Amiga and Atari ST versions were abandoned at various stages.

"I stayed in Spain in March 1989 to work with Aventuras AD," says Tim. "Sales for Gilsoft were rapidly falling without any new products. It was also a change in the industry as you needed a team, and we could never have that as a loose collection of people working remotely all over the UK." Yet despite the anticlimactic end, Tim looks back warmly at Gilsoft's early days in particular. "The Microfairs were great as I loved showing what we had done to people and chatting to other enthusiasts. It put you on the frontline, as it can get a bit lonely just writing code in the middle of the night. And I was very proud of The Illustrator; it worked really well and added to the games."

In 2018, 36 years after the release of The Quill, adventure games are still being released using Gilsoft's useful software. "The whole era was a little bit of immortality for our family and collaborators," Tim concludes. "I was lucky enough to have a good group of friends and the business produced enough income to give me somewhere to live and to enjoy my transition from a teenager, even though I didn't get to go to university. I always say it was probably the best decade of my life." *

WHERE ARE THEY NOW?

TIM GILBERTS

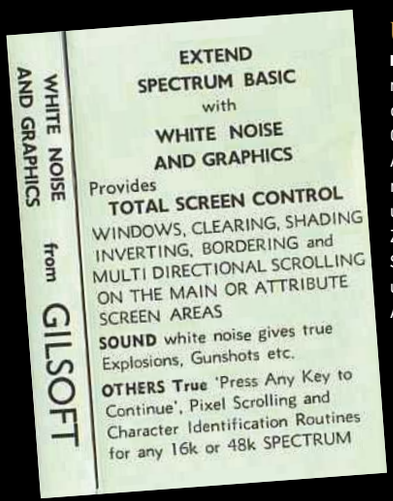
■ Today Tim works as an ICT consultant for the Fire Service on projects such as the recent new joint 999 centre. As a hobby, Tim has been contributing drivers to the Spectrum Next, and is always keen to chat with fans – just like at those ZX Microfairs, 35 years ago.

GRAEME YEANDLE

During the Gilsoft years, and after it had faded away, Graeme worked at BT in a variety of roles from systems analyst to programmer. Currently he spends his time running programming websites such as www.codeabbey.com and helping people who are learning to program.

HOWARD & PAM GILBERTS

After the end of Gilsoft, Howard and his wife opened a wine and beer homebrewing shop on its old premises. Howard passed away four years ago, but Pam is still running the Homebrew Centre, selling kits for hobbyist brewers.

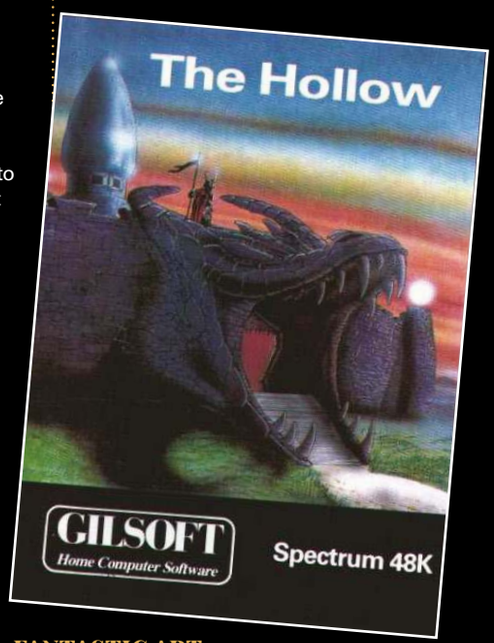


UTILITIES

■ While the company is most remembered (and quite rightly so) for The Quill and the Professional Adventure Writer, Gilsoft released a number of useful utilities for the ZX Spectrum such as Soft Link (an interface utility) and White Noise And Graphics.

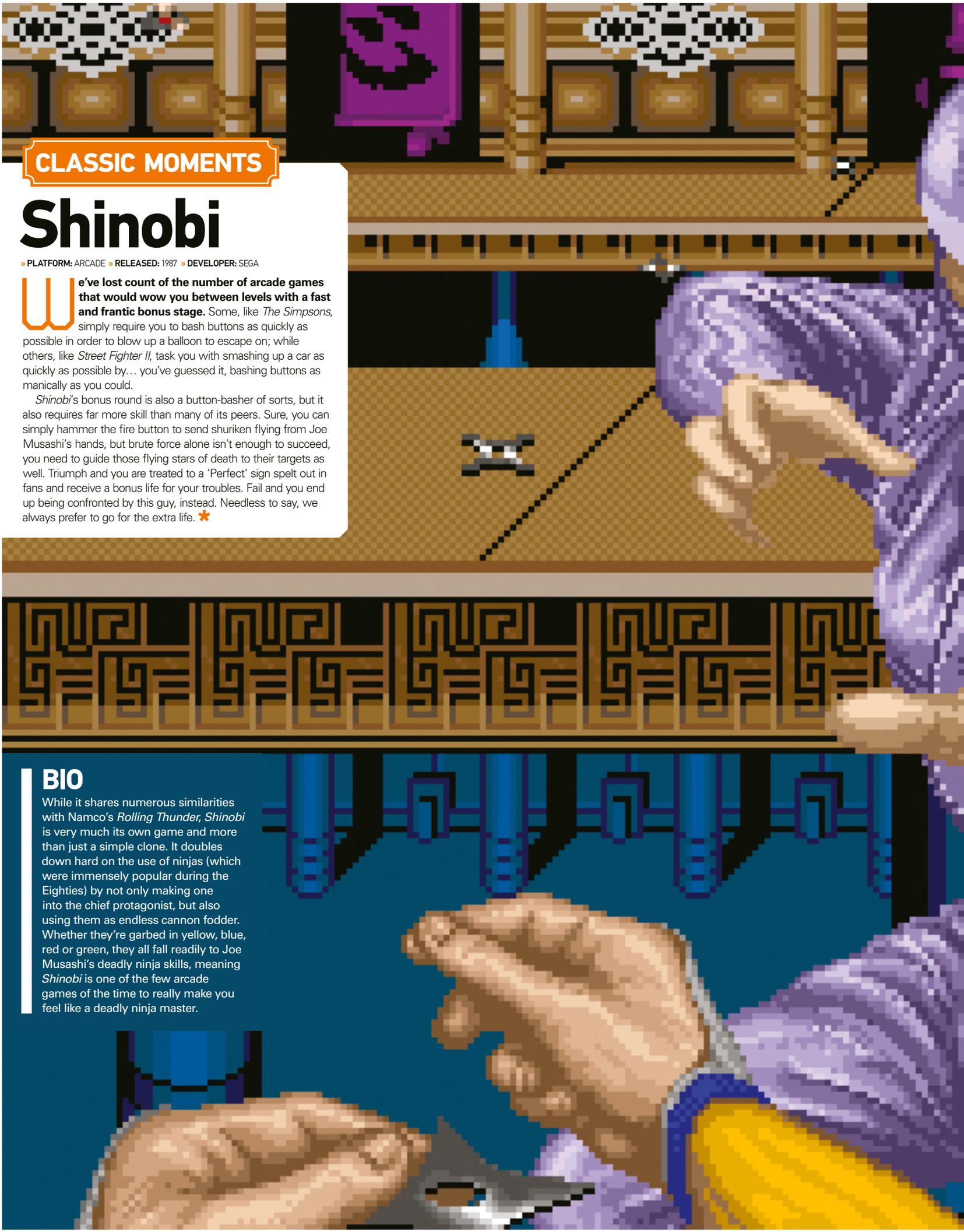
ENGAGING WITH FANS

■ Having been conceived while Tim attended a ZX Microfair, it seems apt that Gilsoft became a staple at such events. Often the whole family would troop its way to London to sell both hardware and software, as well as chat both technical and games to fans.



FANTASTIC ART

■ In addition to some excellent loading screens from Huw Jones, Gilsoft enlisted the skills of local artist Terry Greer to help it with its inlay art. This resulted in memorable covers for games such as *Africa Gardens* and *The Hollow*, and a great picture for the cover of Tim's The Illustrator.



CLASSIC MOMENTS

Shinobi

» **PLATFORM:** ARCADE » **RELEASED:** 1987 » **DEVELOPER:** SEGA

We've lost count of the number of arcade games that would wow you between levels with a fast and frantic bonus stage. Some, like *The Simpsons*, simply require you to bash buttons as quickly as possible in order to blow up a balloon to escape on; while others, like *Street Fighter II*, task you with smashing up a car as quickly as possible by… you've guessed it, bashing buttons as manically as you could.

Shinobi's bonus round is also a button-basher of sorts, but it also requires far more skill than many of its peers. Sure, you can simply hammer the fire button to send shuriken flying from Joe Musashi's hands, but brute force alone isn't enough to succeed, you need to guide those flying stars of death to their targets as well. Triumph and you are treated to a 'Perfect' sign spelt out in fans and receive a bonus life for your troubles. Fail and you end up being confronted by this guy, instead. Needless to say, we always prefer to go for the extra life.

BIO

While it shares numerous similarities with Namco's *Rolling Thunder*, *Shinobi* is very much its own game and more than just a simple clone. It doubles down hard on the use of ninjas (which were immensely popular during the Eighties) by not only making one into the chief protagonist, but also using them as endless cannon fodder. Whether they're garbed in yellow, blue, red or green, they all fall readily to Joe Musashi's deadly ninja skills, meaning *Shinobi* is one of the few arcade games of the time to really make you feel like a deadly ninja master.

MORE CLASSIC SHINOBI MOMENTS

Black Hawk Down

Shinobi's second boss is one of the largest in the game, but it's quick to down, if you know what you're doing. The entire helicopter is impervious to your attacks, with the exception of its nose – so fill it with shuriken as quick as you can. Oh, did we mention the unlimited supply of yellow ninjas that appear from its cabin and the stinger missiles that it fires at you? We didn't? Silly us.

Ninja Magic

Although Joe Musashi is a master of the shuriken, steel throwing stars alone won't be enough to deal with some of the nastier chokepoints that appear in Sega's game. Luckily, Joe is also a master of the ninja arts, which means he's not averse to lobbing the odd bit of magic around when things start to get tough. While he can use a variety of useful spells that tap into certain elements the best sends mirror image versions of himself flying around the screen, instantly killing all but the toughest of enemies.

Cool As Hell

Everyone knows that ninjas are cool, and Joe Musashi is a perfect example. One of the most memorable images of Joe comes from when he exits certain levels. Rather than simply walk off right like he does on many of the levels he instead enters a doorway or cave, casually sauntering into the distance, no matter how many enemies are still left to kill. It looks cool as hell and we've been trying to copy his casual stroll (to no avail) ever since.

Ultimate Satisfaction

Speaking of ninja magic, while it refills on every new stage, you'll get a significant amount of points (5,000 in fact) if you can get through the entire level without actually using it. As satisfying an achievement as that is, it becomes an even better way of showboating if you're able to clear a boss this way. Lobster is arguably one of the best mayors to take down using this technique, and you'll earn our endless respect if you can achieve it.

THE MAKING OF SONIC 3D

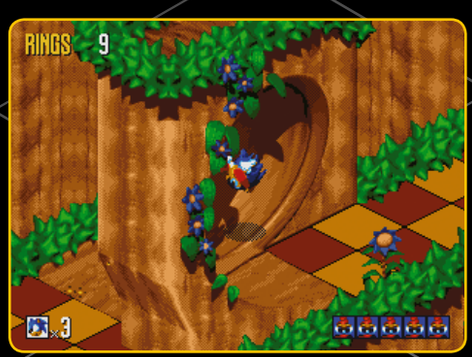
IN THE KNOW

- **» PUBLISHER:** SEGA
- **» DEVELOPER:** SONIC TEAM / TRAVELLER'S TALES
- **» RELEASED:** 1996
- **» PLATFORM:** MEGA DRIVE
- **» GENRE:** PLATFORMER

Sonic fronted the Mega Drive's greatest hits of the early and mid-Nineties. Kats Sato and Jon Burton tell Retro Gamer how they worked with Sonic Team to give the speedy mascot a 16-bit swan song

Words by Rory Milne

Some wrote the Mega Drive off as early as the summer of 1995 when Sega launched the Saturn in the West. However, the next-gen system's initial price stopped many Mega Drive owners upgrading, which led to demand for a new *Sonic The Hedgehog* release for Sega's aging 16-bit console, as former Sega producer Kats Sato explains. "Sega Of America and Sega Of Europe strongly requested a Sonic title on the Mega Drive. At that point, Sega Of Japan decided to use an outsourced team. Somebody at Sega Of Japan found out that Traveller's Tales had done a really great job on *Toy Story* for the Mega Drive, and so Sega chose it."



» [Mega Drive] Early on in *Sonic 3D*'s first level the little blue hedgehog encounters a loop-the-loop.

Unfortunately, the Japanese firm's chosen developer had other ideas, and so when a proposal to produce an unspecified Mega Drive title was rejected, Sega revealed all to Traveller's Tales boss Jon Burton. "We wanted to move on to the PlayStation and Saturn," Jon remembers, "so we told Sega that we weren't really interested. Then it revealed it wanted us to develop the next *Sonic* game for the Mega Drive and we said, 'Oh, *that* game! Well you know how much we love the Mega Drive – we'd love to make it for you!'"

With Traveller's Tales signed up to produce code and visuals for the forthcoming *Sonic* title, there remained the matter of producing a game design, which was a task naturally entrusted to Sonic Team. "We used the three game designers from Sonic Team: Hirokazu Yasuhara, Takashi Iizuka and Takao Miyoshi," Sato notes. "They made a map and also some specs, but Sonic Team's programmers, artists and other designers were busy doing *NiGHTS*, as having a key title from Sonic Team on the Saturn was very important."

Given that the production of Sega's forthcoming *Sonic* title was being outsourced, a decision was made to give the project an isometric rather than side-on viewpoint in order to distinguish it from Sega's core *Sonic The Hedgehog* games, as Sato discloses. "I think Sonic Team wanted something different from the standard *Sonic* 2D platform game because they were using a new

» [Mega Drive] The finale of *Sonic 3D*'s animated intro shows Sonic leaping towards the screen fist first.

development team: Traveller's Tales. Sonic Team were always thinking about the next *Sonic* title, I think they had some sort of idea for the Saturn, and that's why they didn't want Traveller's Tales to do the same type of game."

A further deviation from the main *Sonic* series followed, as the game's isometric sprites required prerendered polygons rather than pixel art. "*Sonic* faced in 16 different directions," Jon recalls, "and so a 12-frame run cycle alone would take 192 frames of animation – all required to be perspective correct, so traditionally designed sprites weren't really an option."

Another option deemed unviable for Sega's isometric *Sonic* title was a two-player mode, as Jon soon found out. "It became clear pretty early on that even a full-screen single-player isometric view would struggle to show what was needed," Jon points out, "let alone a screen using a split-screen mode, so we dropped the idea."

Months into implementing Sonic Team's ideas onscreen, the long-distance between Jon and his Japanese collaborators was significantly shortened, as Sato recollects. "Some of the design was done in England, because it was sometimes easier to work together with Jon and the artists at Traveller's Tales. I brought Iizuka-san, Miyoshi-san and Yasuhara-san to England, and they stayed in a hotel for maybe three, four months. Mainly Miyoshi-san and Yasuhara-san did map design. Iizuka-san was quite busy doing some other title, but he did some design on the map."

Although no longer a designer, a Sega director was equally important to the production of the firm's emerging isometric title, he had even created the project's costars – the Flickies – although Sato isn't certain if Youji Ishii was responsible for partnering them with Sonic. "Ishii San was the development director of Sega's consumer department at the time, so he was my boss. He assigned me to go to Sega Of Europe and work with Traveller's Tales, but I don't remember who came up with the idea of using Flickies in the game, maybe Ishii-san or maybe someone in Sonic Team."

The former Sega producer is more certain of whose idea it was to have different coloured Flickies behave differently. "I think that the behaviour being different for different colours of Flickies came from Jon," Sato muses. "I think one of the Flicky birds was moving slowly, and then the behaviour changed. If my memory is right, Jon did something to change the AI movement and behaviour between the different colours." ▶

> **"Sonic Team wanted something different from the standard Sonic 2D platform game"**
> Kats Sato

DIRECTOR'S CUT

Jon Burton on his new and improved Sonic 3D

What made you decide to revisit *Sonic 3D*?
I watched a few recent video reviews of the game and thought that they made good points, but also that a lot of the issues were solvable now. So that gave me an idea of the things to fix, and then I wanted to add the replayability and map screens that more modern games have. That was the blueprint.

Did you get much input from current or former Sega developers while creating the *Director's Cut*?
I met up for a coffee with Simon Thomley – the *Sonic Mania* coder – just to shoot the breeze more than anything. He offered to help in any way he could, but I was worried about the legal implications of involving other people so I kept the project just to myself in the end.

How does the *Director's Cut* improve on the original?
The handling model was overhauled to make it much easier to play. An overworld map screen was added allowing for replaying levels, collecting hidden objects and accessing new game modes. Super Sonic was also added to the game, following the rules of the previous *Sonic* titles. And I also threw in the level editor and a password save game system.

Other than a legal backup of the Mega Drive *Sonic 3D* stored on a PC and an emulator, what other software is needed to play the *Director's Cut*?
There's a patch file and a program called Delta Patcher – the details are on gamehut.com, alternatively they're on the Steam Workshop (bit.ly/sonic3ddirectorscut).

DEVELOPER HIGHLIGHTS

TOY STORY
SYSTEM: MEGA DRIVE, VARIOUS
YEAR: 1995

SONIC 3D
SYSTEM: MEGA DRIVE, SATURN
YEAR: 1996

SONIC R (PICTURED)
SYSTEM: SATURN, PC
YEAR: 1997

» As well as *Sonic 3D* and *Sonic R*, Kats Sato worked on both *Clockwork Knight* titles.

As for how ideas like Flicky behaviour were shared between the English-speaking Traveller's Tales and the Japanese-speaking Sonic Team, Jon gives full credit to the bilingual producer of the evolving game that the two teams were collaborating on. "Input from Sega was ideas rather than development," Jon explains, "so we worked out of our office, and Kats passed on any suggestions from Sega."

But outside of work time, Jon remembers how demonstrating his Lotus Turbo Esprit's acceleration to his producer resulted in an outcome that didn't need any translation. "I slowed right down, but then I spotted headlights in my rear-view mirror, so I accelerated as hard as I could and then slammed on the brakes to turn into Sato's hotel. Unfortunately, the car in my mirror was a police car. I remember seeing Sega's senior management with their faces pressed against the hotel windows taking in the scene. Turns out the police thought I had stolen the car and made a run for it!"

Meanwhile, Jon and Sato's *Sonic* project was also picking up speed, with industrial fans being one memorable gameplay feature to be implemented into the game. "I believe Yasuhara-san brought the fan idea," Sato ponders. "We really wanted to do something different because isometric was different from 2D platforming, so we saw not from the side-view but from an isometric view. That's why Yasuhara-san came up with this kind of idea."

Additional gameplay concepts followed, such as giving Sonic the ability to turn into a living homing missile. "With an isometric view, it was really hard to actually aim at enemies," Sato reasons, "that's why the 'Blast Attack' worked really well, because it automatically aimed. Without the 'Blast Attack' you made many mistakes, lost coins and soon it was game over. So probably players would have gotten frustrated at such a quick game."

A recurring feature from previous *Sonic* titles was omitted, however, as Sonic's 'Super Sonic' power-up didn't suit the puzzle-based gameplay of the isometric title. "From the beginning, this was a more puzzle element action game rather a battle action game," Sato argues. "Super Sonic was a special feature to fight on boss stages in the other *Sonic* games, and so I think it didn't fit into this because it was just more puzzle element action."

Recurring characters Tails and Knuckles did join Sonic in his isometric Mega Drive debut, but as

» [Saturn] Unlike its core levels, the Saturn *Sonic 3D*'s special stages boast real-time rendered polygon visuals.

» [PC] The visually enhanced main stages in the PC and Saturn *Sonic 3D*'s are absolutely identical.

SONIC VS ROBOTNIK

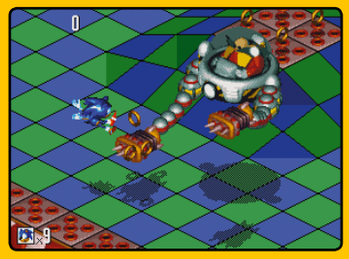
How to win every Sonic 3D boss fight

GREEN GROVE

■ Stay close to Robotnik's spiked ball as it chases you. That way, when his saucer lands to collect its spiky weapon you'll be close enough to bash its glass dome.

RUSTY RUIN

■ Jump on the left hand when it slaps the ground, and as it lifts you up spin into Robotnik's saucer, then stay to the left of the hand to avoid Robotnik's bullets.



SPRING STADIUM

■ Run circuits but keep your distance from Robotnik, wait for him to thump the ground with his hands and then bounce into his dome from the sides or from behind.

DIAMOND DUST

■ Steer clear of Robotnik while he's dropping exploding snowmen, and then hit his saucer when it starts spitting snowballs. If you get frozen tap jump to get free.

"With an isometric view, it was hard to aim at enemies that's why the 'Blast Attack' worked really well"
Kats Sato

» [Mega Drive] Once five Flickies are freed Sonic can dunk them in a hoop and teleport away.

gatekeepers to the game's special stages rather than playable characters, which Sato puts down to expediency. "Because Tails could fly and Knuckles could glide if we had made them playable characters that would have made much of the design completely different. We probably would have had to work harder and think about how the map should work with those characters – and that would have taken time and money."

A further concession to the isometric nature of Sato and Jon's rapidly progressing project meant a loss of control in return for more predictable outcomes. "I think originally the loops were designed so that you could run around them manually like in the previous *Sonic* games," Jon reflects, "but as our maps were 3D we had to change them to being automated to stop all kinds of problems occurring."

Besides troubleshooting, the coder also found time to come up with an unexpected finishing touch for Sonic's latest Mega Drive adventure - an animated intro. Although Jon wasn't influenced by a similar feature in Sonic Team's latest Saturn title. "I really don't remember seeing the *NiGHTS* animated intro, but I was really keen to fit one into *Sonic 3D*, he tells us. "I kept saving memory wherever I could and then surprised Sega a few weeks before going gold with the intro we'd managed to squeeze in."

When *Sonic 3D* hit the shelves, sales were brisk, and while reviewers hoping for 2D platforming were disappointed, those that appreciated its novelty heaped praise on the game. Although Sato focuses on the positive response that he got from within Sega rather than the game's critical and commercial fortunes. "I don't remember the reviews, and I probably didn't care about them or the sales numbers. I felt that the product was really successful. Maybe it was just because the marketing and sales departments really appreciated my work."

On the motivation for producing a Saturn version of *Sonic 3D*, Sato is forthright about Sega Of Japan's opinion of the cancelled game that the Traveller's Tales port replaced. "*Sonic Xtreme* was really bad. We reviewed it many times internally, but it didn't reach the quality needed. But I think marketing wanted a *Sonic* title on the Saturn, and Sega in Japan was busy doing other titles. That's why we did a conversion of *Sonic 3D* from the Mega Drive."

In reviewing *Sonic 3D* now, Sato is proud of the game's unique attributes, but feels that with more time it could have been even better. "Unlike the 2D *Sonic* games, *Sonic 3D*'s isometric view gives quite a different type of game with a lot of puzzle elements, and it's really fun to play. So I'm definitely really proud that I was involved in the project. But of course there are some regrets, if we could have we would have liked to have produced more stages."

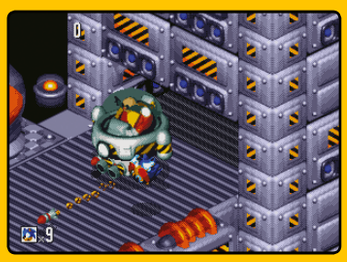
When asked for his assessment, Jon highlights *Sonic 3D*'s visuals and slickness before finishing with an admission that he likes his 2017 enhanced version that much more. "It's a great looking game, it's technically very proficient and it was executed according to the design that Sega gave us. I always liked it, but I prefer the *Director's Cut* now!" ✱

VOLCANO VALLEY

■ Stock up on rings while dodging fireballs, then jump onto a pipe and repeatedly spin into Robotnik to beat him – the rings will shield you from a few fireball hits.

GENE GADGET

■ Keep to the front and the far left or right of the conveyer belt – depending on which side is spike-free, and then bash Robotnik when he stops firing missiles.

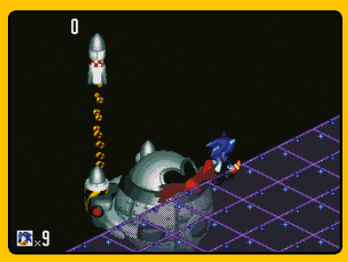


PANIC PUPPET

■ Wait until the robot is about to slap you, and then hit its pulsing shoulder. For parts two and three, hit one shoulder then the next while dodging projectiles.

FINAL FIGHT

■ Evade Robotnik's slower weapons, find safe spots to avoid his lasers and pellets, and use Spin Dashes to dodge his giant hands – and then hit him between salvos.



Neo-Geo Pocket Color fact

■ A second model of the Neo-Geo Pocket Color was released exclusively in Japan in October 1999, featuring a slightly lighter and slimmer body than the original.

PROCESSOR: 16-BIT TOSHIBA TLCS-900H CPU (6.144MHZ), 8-BIT Z80 SOUND CPU (3.072MHZ)
RAM: 12KB MAIN MEMORY, 4KB Z80 MEMORY
GRAPHICS: 160X152 RESOLUTION, UP TO 64 SPRITES ON-SCREEN, UP TO 146 COLOURS ON-SCREEN (FROM PALETTE OF 4,096)
AUDIO: T6W28 TEXAS INSTRUMENTS SN76489 VARIANT (THREE SQUARE WAVE CHANNELS PLUS NOISE GENERATOR, WITH DIRECT DAC ACCESS)
MEDIA: ROM CARTRIDGE (UP TO 4MB)
OPERATING SYSTEM: 64KB NEO GEO POCKET COLOR BIOS ROM

Neo-Geo Pocket Color

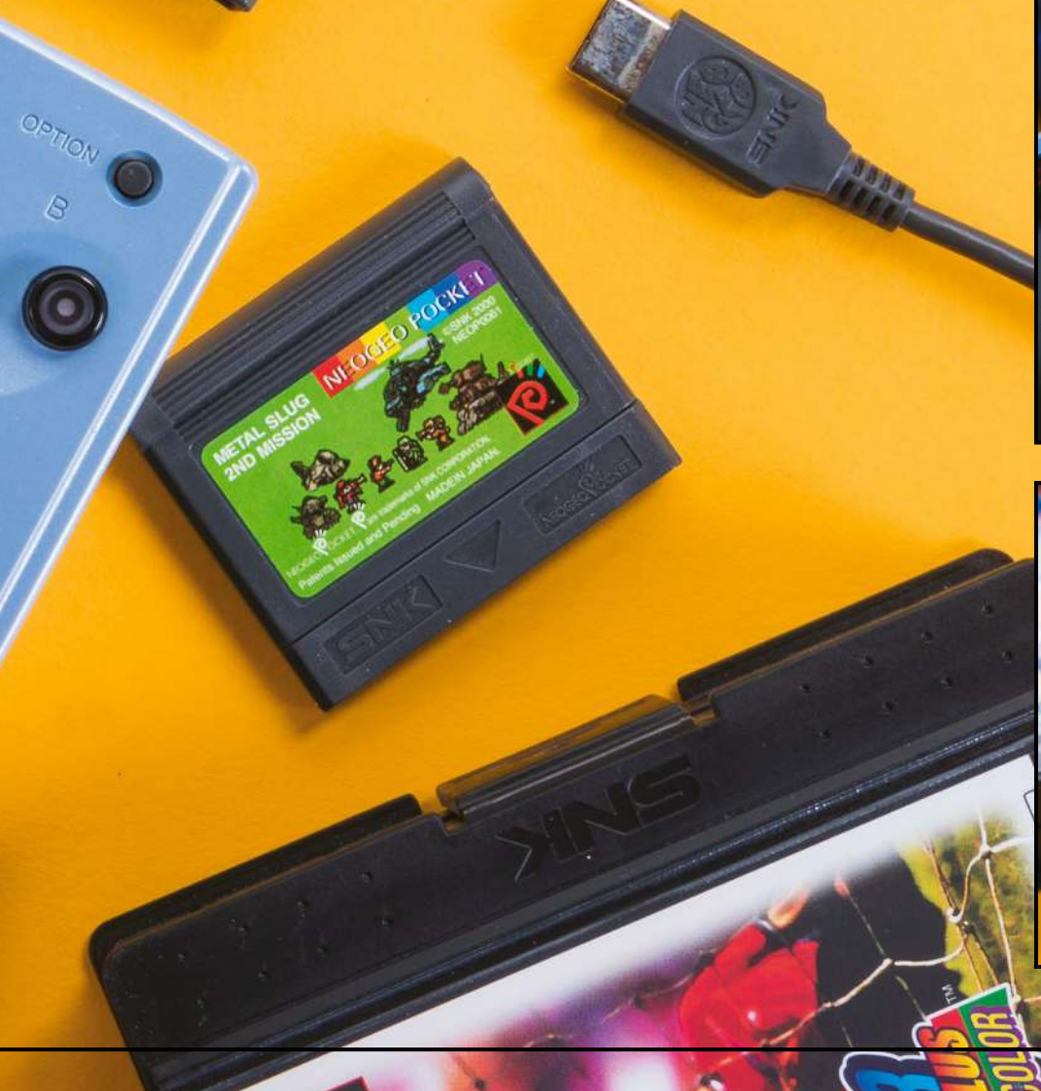
» **MANUFACTURER:** SNK » **YEAR:** 1999 » **COST:** £59.99 (launch), £30+ (today)

Less than six months after releasing the ill-fated Neo-Geo Pocket, SNK delivered its successor – a substantially similar handheld console with backwards compatibility and a full colour screen. The result was a rather stunning piece of kit, which delivered on every front. The 16-bit CPU and strong sprite-shifting capability allowed the machine to deliver faithful miniature versions of Neo-Geo arcade hits, and the microswitched digital thumbstick made for a perfect controller. The console ran for many hours from just a pair of AA batteries, and it was even a little cheaper than Nintendo's Game Boy Color.

Unfortunately, the Neo-Geo Pocket Color faltered in the marketplace. *Metal Slug: 1st Mission*, *Neo Turf Masters* and *The King Of Fighters R-2* were great games but not the most high-profile, and SNK recognised that, smartly licensing handheld-friendly games such as *Pac-Man*, *Puzzle Bobble Mini* and *Sonic Pocket Adventure*. But the Game Boy line was undergoing a radical revitalisation fuelled by the *Pokémon* juggernaut, and SNK's peak share of the US handheld market was just two per cent. Aruze purchased SNK in January 2000 and withdrew the company from international markets in June 2000, and with little but pachinko games to offer, the Neo-Geo Pocket Color fell into decline in Japan before ultimately succumbing to SNK's bankruptcy in October 2001.

EDITOR'S CHOICE Metal Slug: 1st Mission

SNK often took care to ensure that Neo-Geo Pocket games had depth and lasting appeal, and *Metal Slug: 1st Mission* is a fine example of this. Though the run-and-gun game design of the arcade game came across largely intact (though with a greater helping of platforming), the structure around it was designed for handheld play. Out went one-hit kills and linear progression, in came the health bar, frequent pick-ups and a map with over 30 stages and branching paths. As a result, this is a thoroughly enjoyable experience for series fans and newcomers alike.



The Last Blade

Arguably the most beautiful fighter ever made, The Last Blade paints a picture of a warrior age coming dramatically to a close, with combatants clashing on the very edge of oblivion. It's time to face the final curtain

Words by Rob Jones

The blades clash, the cherry blossom falls and, as the winds of change howl across a 19th century Japanese landscape, you the player must fight, furiously, until your very last breath. You must fight to carve out your own future in a world that is on the brink of destruction, both physically and culturally, and to do so, to be the last warrior standing, you must become one with your blade.

The bakumatsu period is your setting for combat in *The Last Blade* – SNK's stunning weapons-based versus-fighter series swan song – the 19th century 'final curtain' of the Edo period and the Tokugawa shogunate. Japan is in the grip of a brutal civil war and, in the chaos, the 'Crisis Christ' and former guardian of Hell's Gate (a passage to the daemon-infested makai underworld) Shinnosuke Kagami intends to bring destruction to the Earth and rule it like a god.

And you, the player, must choose from a 12-warrior roster and then master the game's four-button control scheme and combat system in order to survive a series of deadly duels and prosper against Kagami. Only in doing this will you stand a chance of ending the Crisis Christ and his resurrected henchman Musashi Akatsuki – only then will you live through the dramatic and poetically melancholic bakumatsu.

Indeed, SNK made an inspired choice when making this refined, darker, and more mature spiritual sequel to *Samurai Shodown*, with the 19th century bakumatsu (the game is set in the year 1863) the perfect setting to finish its romance with Japan's feudal, warrior culture history. And the studio's passion for this project and insane skill in terms of producing one-on-one fighters is poured into *The Last Blade* in every aspect of the game, from the artwork right through to its musical score.

The background locations of each brawl in *The Last Blade* are simply works of art. Sakura tree-flanked ornate bridges, flower-lined city gates, isolated wheat-strewn rural crossroads, deep forest waterfalls and bamboo groves bathed by silver moonlight are just a few of the game's lush-looking locations. *The Last Blade* excels at providing an atmospheric backdrop to its frantic action like few other similar games have managed.

Character art and animations, too, exude quality and classical style. From hero of the piece Kaede (the name, fittingly, means 'maple'), who fights with a grace that stems from his use of the real life Kasshin Ittou fighting style, to the wolf-like directness of the katana-wielding, hakama-clad Shinsengumi (military police) unit leader Keiichiro Washizuka. Other standouts include the kasa (flat straw hat) wearing, decked in green ninja Zantetsu, and the western Christian stylings of Kagami, but in reality, each fighter in *The Last Blade* looks fantastic.

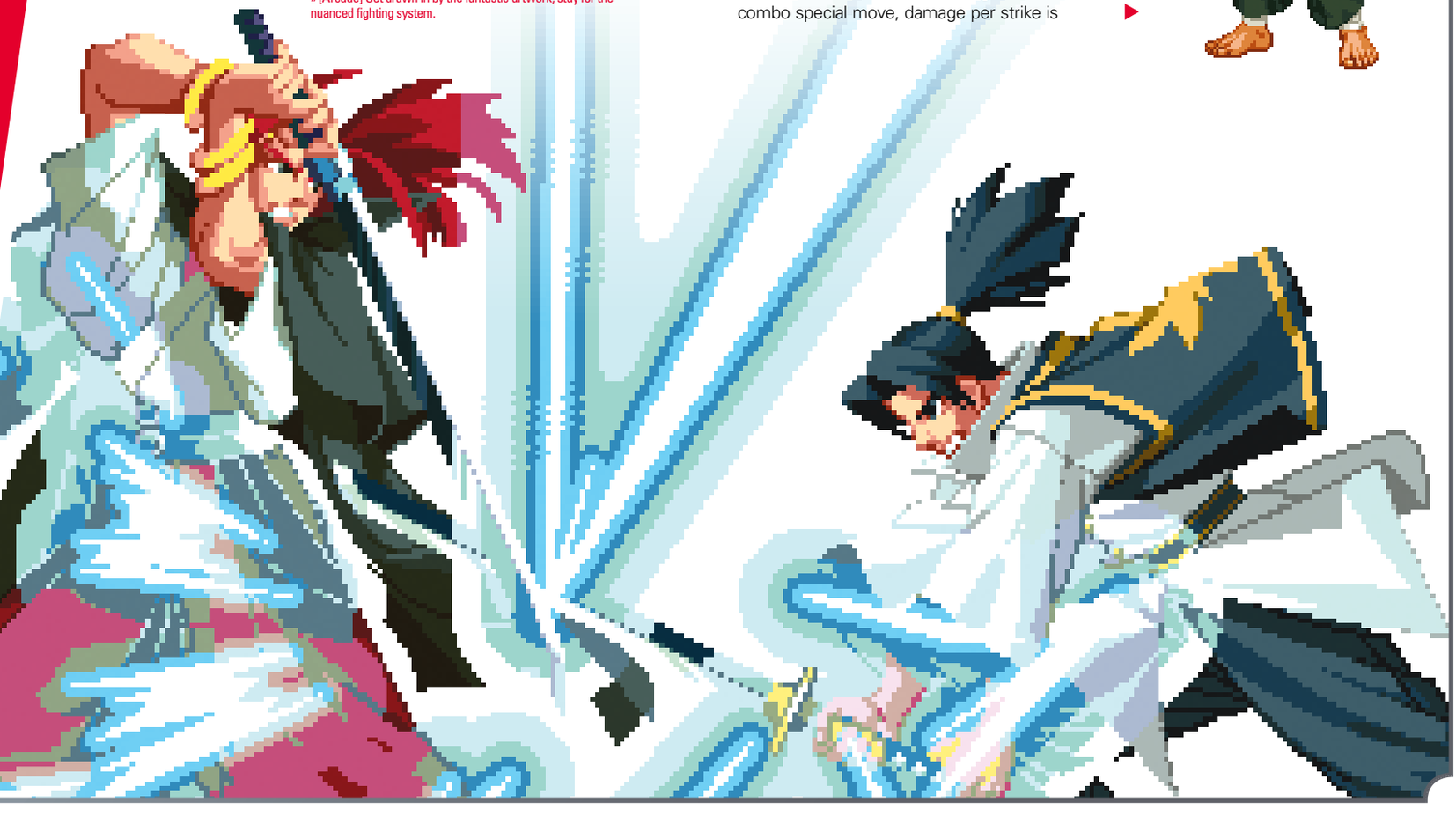
The Last Blade's mechanics utilise SNK's tried-and-tested four button fight game layout, with moves broken down into a variety of weapon and kick strikes, and varied too depending on which way the joystick is flicked as the button is pressed. Where things quickly get very interesting, though, is in the game's adoption of 'Speed' and 'Power' modes, one of which is selected after picking a character from the roster.

» [Arcade] Get drawn in by the fantastic artwork, stay for the nuanced fighting system.

» [Arcade] Akari uses her magic to summon a large daemon to help attack Shigen.

Speed mode grants the character the ability to chain multiple move strings together into an elongated combo and, neatly, players can also transition a combo via interruption into a special move. As a trade-off, in Speed mode damage per strike is reduced, normal moves do not produce any damage on an opponent block, and the player also cannot call on the character's Super Desperation Move (we'll get to those), either.

The opposite fight mode, Power, plays very much like the reverse of Speed. That's because, while chain combos are ruled out along with a character's combo special move, damage per strike is ▶



MEET THE CAST

KAEDE
■ The lead character in *The Last Blade*, Kaede fights with a katana using the Kasshin Ittou fighting style taught by legendary swordsman Gaisai. His name is based on the Japanese word for maple.

MORIYA MINAKATA
■ Trained alongside Kaede, but wrongly accused of their master's murder, Moriya fights with the Kassatsu Ittou-Ryuu style. His katana is named Katsura Of The Moon.

YUKI
■ Yuki, whose name means snow in Japanese, is the last character to be trained by Gaisai and wields a 'Fate-Penetrating Spear' naginata, a weapon associated with women in the bakumatsu period.

JUZOH KANZAK
■ The adopted brother of Akari Ichijou, who persuades him to accompany her, Juzoh is a powerful fighter that uses a huge metal club as their weapon of choice.

AKARI ICHIJOU
■ Akari hails from Kyoto and enjoys a good adventure. She is an onmyouji, a sorcerer, and can summon spirits to help her fight.

HYO AMANO
■ A ladies' man that is obsessed with sake and having fun, Amano fights with a bokutou wooden sword. He is modelled on Kumo from the manga *Haguregumo*.

SHIGEN NAOE
■ He's a guardian of Hell's Gate and, after getting set in stone for ten years by big bad Shinnosuke Kagami, desires revenge.

BASED IN REALITY
THE AUTHENTIC ELEMENTS OF THE LAST BLADE

EAST MEETS WEST
■ Notice the realistic bakumatsu-era depiction of a Japanese noble alongside a brace of western gentlemen.

A CULTURAL CAPITAL
■ The bridge and architecture here are reminiscent of counterparts in Kyoto, the once capital of Japan and home of the Emperor.

NOW YOU SEE ME
■ The ninja, Zantetsu has the ability to briefly disappear and turn invisible, similar to the ninjas of legend.

THE FALLEN SHINSENGUMI
■ Shikyo is a corrupted Shinsengumi warrior, and still wears the tattered remains of his old uniform.

SAKURA SEASON
■ Falling sakura is symbolic of how times are changing during this period of Japanese history.

ZANTETSU
■ One of the last ninja, and therefore master of ninjutsu, Zantetsu fights to prove his prowess as a warrior using a pair of tantou short swords.

SHIKYOH
■ A former member of the elite Shinsegumi military police, however now a crazed and psychotic killer, Shikyoh fights with a deadly pair of curved blades that can be united at the hilt.

KEIICHIRO WASHIZUKA
■ A unit leader of the Shinsengumi elite police force, Washizuka is a straight-laced master swordsman who fights with the Tennen Rishin Ryuu style.

LEE REKKA
■ A Chinese martial arts master, Rekka fights with a folding fan (or Shazi), nicknamed the Crimson Lotus. His fighting style is based on the Flying Shadow Fist Kung Fu of the Shaolin.

GENBU NO OKINA
■ Okina is another of Hell's Gate's guardians. His name means 'Old Man Of The Black Tortoise' and, despite being a master of the sword, fights with his trusty fishing rod.

MUSASHI AKATSUKI
■ Based on the real Miyamoto Musashi, Aktsuki is one of the big bads, fighting with his Niten Ichi-Ryuu Kai style.

SHINNOSUKE KAGAMI
■ The main antagonist and boss of *The Last Blade*, Shinnosuke 'Crisis Christ' Kagami wishes to open Hell's Gate so he can use its daemonic denizens to take over the world.

"TIMING IS EVERYTHING WHEN UTILISING REPEL, HOWEVER IT SUPERBLY ADDS TO THE GAME'S AUTHENTICITY"

▶ increased, normal attacks cause minor damage upon block, and the character's Super Desperation move is made available when their life meter is flashing and 'POW' gauge is full.

Special moves and combo specials, as well as Desperation and Super Desperation attacks rely on *The Last Blade*'s super meter, a traditional fighting game gauge that fills during combat. While special moves are the typical enhanced attacks found in the vast majority of other versus fighters, Desperation and Super Desperation moves are more complex. Desperation attacks rely on one of two states, the player's super meter being full or their life meter flashing red, and if pulled off they cause the character to execute a move which, if it connects, causes massive damage.

Super Desperation attacks are even more powerful versions of these moves, relying on the player being in Power mode and having both a full Super Meter and a flashing red life meter. These moves are akin to execution moves, causing a fatality in almost all circumstances if they connect, due to a simply monstrous amount of damage being done to the opponent. Both Desperation and Super Desperation attacks will leave the player massively open if they are blocked though, so while deadly, they are in no way an instawin mechanic.

And, talking of blocking, *The Last Blade* not only has one that also allows for air blocking too (vertical or backward jump only), but also a 'Repel' attack. This is bound to the D button and when pressed as the opponent is launching an attack will block it via parry and then immediately and automatically land a small counterblow. Naturally, timing is everything when utilising Repel, however it superbly adds to the game's authenticity (parrying is a key skill in real weapons-based combat) and sheer cool factor, ▶

» [Arcade] Kaede's one-handed fighting style is actually real and was pioneered during the time the game was set.

POWERING UP

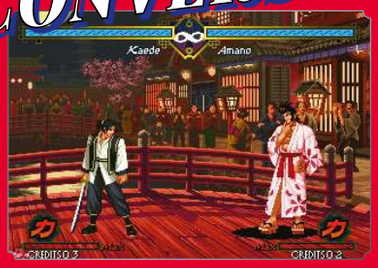
While the heart is drawn toward the original bakumatsu romance due to its beautiful purity, *The Last Blade*'s sequel technically offers the better all-round package as a fighting game.

Set one year after the events of the original game, *The Last Blade 2* sees the Hell's Gate tear between the real world and the makai, the daemonic underworld, which is still very much active and in need of sealing. Three new characters are introduced: Hibiki, Kojiroh, and Setsuna (the latter being one of the coolest fighting game characters ever made).

The game also adds more in terms of game mechanics, too, refining the Speed and Power modes while also adding in a new EX Sword Gauge style, which combines elements from both, making each battle to the death even more tense and dynamic than before.

Best of all, *The Last Blade 2* also expands on the simply breathtaking art and musical score witnessed in the original title.

CONVERSION CAPERS



◀ NEO-GEO AES

■ Basically identical to the MVS arcade original, *The Last Blade* on Neo-Geo AES is a super-faithful port, delivering a stacked 474Mbit cart that shows the bakumatsu brawler off perfectly. A full character roster, buttery-smooth gameplay, and a full-fat feature set make this version a must own for Neo-Geo fans.

▲ PLAYSTATION

■ The PlayStation version of *The Last Blade* is a similar port performance-wise to the Neo-Geo CD version, but also boasts improved load times as well as an exclusive anime intro (of middling quality, admittedly) that introduces all characters, and it shows a bit of extra story, too.

NEO-GEO CD ▶

■ The Neo-Geo CD version of the game is unique in the fact that it comes with a fully orchestrated arranged soundtrack. This is absolutely stunning and is a sweet boon that helps you to forget about this port's (as to be expected for SNK's CD system) annoyingly long load times and small moments of slowdown.

◀ PLAYSTATION 2

■ Released well after the game's original release, the PlayStation 2 version of *The Last Blade* is part of a combo package that includes both it and its sequel, adding in a must-have feature for 2006: online network play via the PS2's modem. You get the arranged soundtrack from the Neo-Geo CD version, too.

◀ NEO-GEO POCKET COLOR

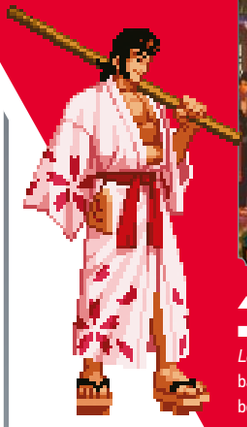
■ A interesting quasi-port of *The Last Blade*, the Neo-Geo Pocket Color version actually combines elements from *The Last Blade 2* as well, with the game sitting somewhere between the two. The transition into the sequel has to be earned by the player, who must unlock its features by winning.

PLAYSTATION 3/PSP ▶

■ A conversion of a conversion, this is the Japanese version of the original PlayStation port of *The Last Blade* brought much later to the PlayStation Network store. Due to it only being available in the Japanese PlayStation Network store, though, this is one of the more lesser-known versions of the game in the west.

WII/WII U ▶

■ Available originally on Wii but, due to it running in Nintendo's Virtual Console, also playable on Wii U, this *The Last Blade* port is a fully featured, but very standard, version that doesn't excel in any area. This conversion of the game has recently been arguably succeeded by the excellent Nintendo Switch port by Hamster Co.



▲ PS4/XBOX ONE

■ While Neo-Geo purests may hate to admit it, the PS4 and Xbox One ports of *The Last Blade* are – aside from the fact they are not running on original hardware – basically perfect. The game flies on both systems, with zero slowdown, and also boasts added features over the original, like controller vibration support.

◀ PC

■ One of the more recent ports of the game, *The Last Blade* on PC offers a variety of display options, such as ability to run the game at various resolutions up to 1080p and add scanlines if desired, as well as allowing online play with leaderboards, too. While the audio is clean, you don't get the arranged soundtrack in-game, which is a shame.

SWITCH ▶

■ The latest, and arguably greatest, edition of SNK's sword-slinging slasher, *The Last Blade* on Switch is a very authentic yet augmented experience. The same super port technically as the PS4 and Xbox One, Hamster Co here, though, lets you to take the silky smooth and beautiful action of clashing katanas on the road with you.

» [Arcade] Lee Rekka's overhead flame-fan-kick move is devastating.

"WATCHING THE LAST BLADE IS LIKE WATCHING A BEAUTIFUL PAINTING FROM A REVERED MASTER COME TO LIFE"

▶ with the flow of combat fluidly transitioning between the two warriors.

The Last Blade's soundtrack, and especially the fully orchestral iteration included first on the Neo-Geo CD version of the game (the MVS and AES original is synthesised), is so good that it was released separately on CD and simply stands apart as a piece of art. Interestingly, unlike the traditional Japanese style and instrumentation used in *Samurai Shodown*, the soundtrack to *The Last Blade* is largely in a 19th century western romantic style, evoking the emergence of western culture in Japan during the bakumatsu and then following Meiji Restoration.

Tonally, as noted above, *The Last Blade* is darker, realistic, and more melancholic than *Samurai Shodown*. This is another of its strengths. This bleak, unresolved, end-of-days air even pervades many of the game's character endings, with only a few having a genuine comedic or light-hearted feel. Most merely return to what remains of their lives, or are forced to push on into the mists of an unknown future. It all adds gravitas to *The Last Blade*, grounding it no matter how fantastical its overlaying fiction is, in a real period of the past where thousands died.

» [Arcade] Shigen is a physically powerful character, demonstrated here by slamming Juzoh to the floor.

If anything, though, *The Last Blade*'s enduring legacy, the thing that it should be remembered for most, is that it transcended the fighting game genre into pure art. Other games came close, and many contenders came from SNK no less, but none did so like this and, arguably, outside of the series none has done so since. Watching *The Last Blade* is like watching a beautiful painting from a revered master come to life, and the fact it does this while offering a superbly deep combat system that's hard to master and fun to play, too, is remarkable. ✱

» PUSHING THE LIMITS

Stardust

This showpiece didn't result in instant stardom, but Bloodhouse's debut was a strong foundation

» **PLATFORM:** AMIGA » **DEVELOPER:** BLOODHOUSE » **RELEASED:** 1993

It's fair to say that *Stardust* wasn't a tremendously innovative game, when taken at a pure play design level. Essentially, it was an enhanced version of *Asteroids* – a relative relic of gaming at 14 years old. Even the idea of a 3D space shooter had been pulled off many a time before. However, neither of these ideas had been executed on a home platform with quite the level of sophistication achieved by Bloodhouse.

In the main stages, colourful animated scenes serve as a backdrop to the *Asteroids*-style action, but the truly impressive aspect of these sections is the enemy graphics. Ray traced asteroids fly across the screen, saving memory by using a variety of different colours to represent their resilience. The occasional similarly detailed enemy ship also puts in an appearance, boasting effects like multisegmented sprites. The game also features optional extra missions, which accounts for the *Thrust*-style screenshot found on this page, with its writhing scenery and warped background.

But it was the 3D tunnel stages that really set the game apart from the games that had appeared on the platform previously – there was none of the jerkiness that plagued games such as *Space Harrier II*. The tunnel animation was created with incredibly limited resources, but was big enough to scroll and convey a sense of movement, and animated fast enough to cover its limitations. By limiting these stages to just two enemy types, there was enough of an animation budget for the sprites to appear to grow naturally as they approached the screen, thus avoiding the computationally difficult task of true scaling.

Stardust was an awesome achievement on the Amiga, revitalising a classic but with the small flaw of an extreme difficulty level. The game scored well in the press as a result – scores ranged from *Amiga Action*'s low 78% to scores of 88% in *Amiga Format*, 89% in *Amiga Power* and 91% in *The One*. An enhanced version titled *Super Stardust* was later published for AGA Amiga platforms, this time having been picked up by Team17. Bloodhouse would soon merge with Terramarque to form Housemarque, which is still going strong today with games like *Resogun*, *Nex Machina* and *Super Stardust VR*.

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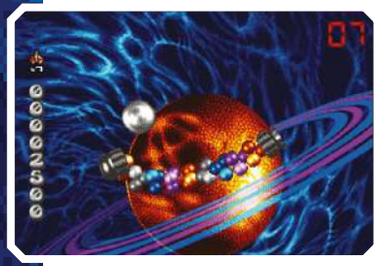
HOW IT PUSHED THE LIMITS...



Clever Colour

While the Amiga is capable of performing tricks to generate additional colours, *Stardust* just makes fantastic use of limited resources. This screenshot employs 31 colours, which is incredible given the detail on display.

Ray Tracing

This technique for creating realistically lit 3D objects was used extensively in the creation of *Stardust*'s sprites. A twisting, spinning asteroid, space mine and abstract head all look phenomenal as a result.

Amazing Animation

While you couldn't quite mistake *Stardust* for true 3D, the animation actually looks better than most prerendered games of the era. Better yet, it allows for a good simulation of scaling for the tunnel sprites.

Memory Miracles

Cramming that tunnel animation that's so impressive into the Amiga required major graphical efficiencies. It was achieved with just four colours and lots of dithering, a handful of frames of animation and copper mirroring.

The Making of...

I HAVE NO MOUTH, AND I MUST SCREAM

In the history of videogame adaptations, one title stands out above all others as the most unlikely of success stories: the dark, bizarre and twisted I Have No Mouth, And I Must Scream

Words by Hareth Al Bustani

IN THE KNOW

- **» PUBLISHER:** CYBERDREAMS
- **» DEVELOPER:** THE DREAMERS GUILD
- **» RELEASED:** 1995
- **» PLATFORM:** PC, MAC
- **» GENRE:** ADVENTURE

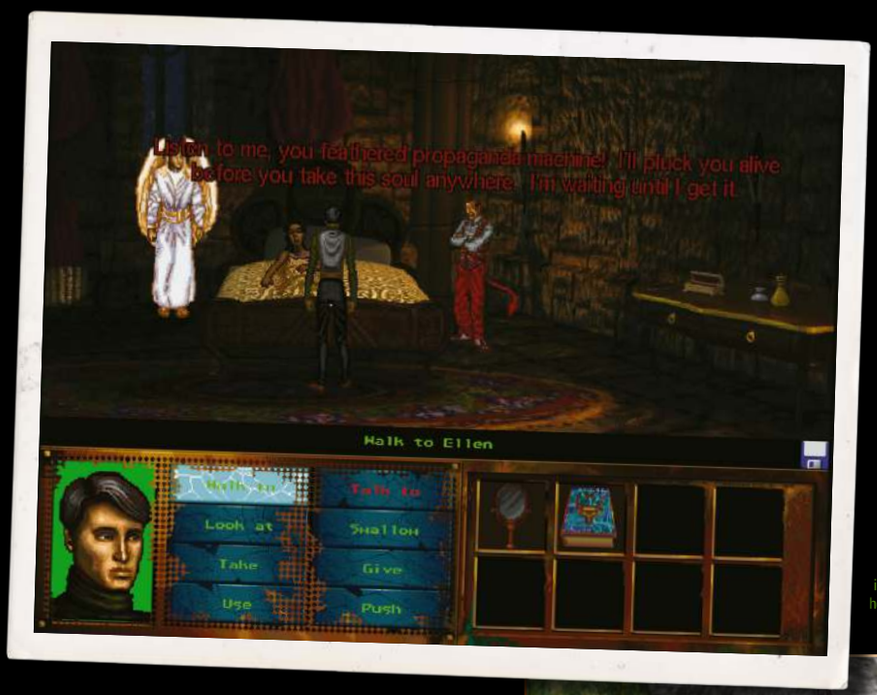
In 1995, the point-and-click adventure genre reached critical mass. Sierra and LucasArts titles were a huge deal, selling in the hundreds of thousands. Having previously worked with HR Giger on the audacious 1992 horror title, *DarkSeed*, indie studio Cyberdreams went for the jugular – approaching Harlan Ellison for an adaptation of his 1967 short story, *I Have No Mouth And I Must Scream*.

Suffice to say, this would be no ordinary videogame adaption and the prodigious Harlan, author of roughly 2,000 works and winner of numerous awards, was no ordinary writer. Notorious, unrelenting, visionary; he once mailed 213 bricks to a publishing house, followed by a dead gopher, via fourth-class mail, when a cigarette ad was printed in one of his paperbacks. Grotesque and harrowing, *I Have No Mouth And I Must Scream* revolves around a supercomputer, which has wiped out humanity, save a handful of people, who remain trapped in an artificial hell of the machine's design. Not exactly standard puzzle adventure material.

Even more unusual, Harlan himself was brought in to flesh out the concept with writer David Sears. When the two discussed the project at the annual Game Developers Conference, among those in the audience was designer, David Mullich. "I was very jealous, because *I Have No Mouth And I Must Scream* was my favourite short story," Mullich says. "I thought that, given my success in adapting the television show, *The Prisoner*, into a videogame, that I was the best person to develop such a game." Cyberdreams agreed. When Sears left the project months later, Mullich was brought in to produce it.

The original story follows five characters, who have been tortured since the Allied Mastercomputer, or AM, destroyed mankind 109 years ago. Boasting godlike powers, AM has made his prisoners immortal. They spend their days in squalor, fending off hunger and monsters, while suffering all manner of violent demises. At

» [PC] Unlike the short story, the game gives gamers the chance to defeat AM, with the help of unexpected friends.



» [PC] The paranoid Ted is surrounded by unsavoury characters, each with conflicting agendas and information, preying on his insecurity.

» [PC] Benny's story was rewritten for the videogame. Cruel in his previous life, he must learn to be compassionate.

the end of the story, the narrator, Ted, seizes a rare opportunity to help kill his fellow captives, but is caught before he can commit suicide himself. AM mutates him into a blob "whose shape is so alien a travesty that humanity becomes more obscene for the vague resemblance". He is trapped, forever to endure his captor's hatred alone: "I have no mouth. And I must scream."

Sears and Harlan wanted to explore why AM chose these individuals, using puzzles to unravel their backstories and personalities. Though the duo completed three quarters of the design work, Mullich says there were some issues. "Much of the problem was that individual lines of dialogue needed to be turned into full, interactive conversations that could branch into different directions."

With Harlan too busy to write the dialogue himself, Mullich picked up the slack. "Although I am a far inferior writer," he concedes, "Harlan would 'punch up' some of the scenes I had written." Moreover, while Sears had never designed a game before, Harlan was not even a gamer. "Some of the puzzles he suggested seemed very difficult to him, but I had to explain that a gamer would figure them out right away, and then I'd come up with ones that I thought were more challenging," adds Mullich.

The producer, who now runs Electric Sheep Game Consulting and heads the Los Angeles Film School's Game Production programme, says he first became a fan of Harlan's work when he saw the writer's legendary 1967 *Star Trek: The Original Series* episode, *The City On The Edge Of Forever*. Despite the author's famously ferocious demeanour, he says it was a "big treat" working with him. "He threw a few insults at me, like being 'a member of the Cyberdreams' brain trust', but I just ignored them and eventually won his trust."

As the game starts, players must complete quests for the five prisoners – using a SCUMM-style interface to interact with environments, via a selection of verbs and inventory items. Gorrister, for example, wakes up on a zeppelin – where AM suggests he might finally be able to kill himself. The ex-trucker is forced to confront his abusive treatment of his institutionalised wife, and his tumultuous relationship with his mother-in-law. He must also retrieve his heart, which has been cut out. However, the sadistic AM sets up various red herrings – such as a poisoned bowl of punch – which result in the game resetting.

After each character has completed their quest, the player attempts to help them kill themselves, along with AM. There are multiple endings – numerous bad endings, alongside one good one – and Harlan took great pride in how difficult it was to achieve the good ending. This would only be available to players who had made noble decisions earlier in the game. The perfect ending would result in the final character taking over the supercomputer, while the earth recovered, in time to host a lunar colony of 750 sleeping survivors – a far more hopeful ending than the original short story. The numerous bad endings resulted in either the character's turning into the titular mouthless blob, or the lunar colony being killed off.

Dramatis Personae

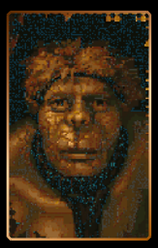
The evil godlike antagonist, and its human test subjects

AM

■ The Allied Mastercomputer, it began as three supercomputers designed by the Americans, Chinese and Russians. They eventually merged, wiping out the human race. AM turns into a god, with the power to manipulate biology and matter.

Gorrister

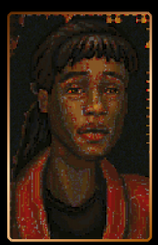
■ Gorrister is a former trucker, whose wife was institutionalised following their abusive marriage. After 109 years of torture, he awakes on a dark, filthy zeppelin, flying over a desert, where AM promises he may finally kill himself.



Benny

■ During a war with China, Benny, a sergeant, murdered one of his weaker soldiers, and three others who tried to help him. Though insane, AM has restored Benny's wits, only to cripple his legs and send him to a bio-organic jungle.

Ellen

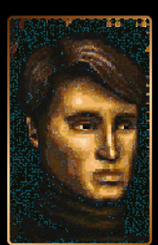


■ She was once a high-flying engineer, whose life tragically fell apart when she was sexually assaulted in an elevator. By the events of the game, AM has sent her to a robotic pyramid, where it claims to have left her the tools to destroy it.

Nimdok

■ A former Nazi scientist whose tortuous experiments on human guinea pigs form the basis of AM's own godlike powers over the human body. He is sent to a concentration camp, where he learns of his own Jewish heritage.

Ted



■ He's a former conman, who lived a life of luxury, bankrolled by various rich lovers. Living a lie made him paranoid. AM sends him to a Medieval castle, where he must rely on a cast of unsavoury characters to save his lover, Ellen.

» Art director, Bradley Schenck, did much of the work on Benny's backgrounds, which incorporated HR Giger's biomechanical visual style.

» [PC] The art style was achieved with a unique blend of 3D rendering and hand-painting over scanned sketches.

▶ Although Mullich, who was simultaneously working on *DarkSeed II*, had previously juggled multiple projects at Disney and Edu-Ware, he was impressed by Cyberdreams' approach to hiring third parties. "For one project, I might separately hire a designer, an art director, a development team, a voiceover producer, and a music composer, and my job would be to coordinate all these different contractors," he says. "It was part of a shift towards more and more people with expertise in different disciplines working on a game."

Early in the project, Cyberdreams hired a team of storyboard artists to establish a visual style, before bringing in The Dreamers Guild, to implement it. To his surprise, Bradley Schenck, who had joined The Dreamers Guild as an artist, was immediately thrust into the role of art director, tasked with visualising Harlan's hellscape. He was given a level of autonomy that he would never enjoy again. "It's much more common to find that you have all the responsibility for your team's work, but no real authority over them. That's a pretty reliable recipe for craziness and burnout," says Bradley, who today sells original art and books at his website, Webomator.

» [PC] The worst ending a character can achieve mirrors Ted's original fate: turned into a blob, in agony, but unable to scream.

The design document was a big, thick notebook," he recalls, "and that made it confusing for anyone who jumped in at midstream." Although it was his first experience managing other artists, he says it was a talented team. "The core of the art team was about six people. We used our larger projects as a training ground for new hires, though, so new artists would work on *No Mouth* for a short time when they started." Schenck only met Harlan once, at a Cyberdreams office party, where the author said he reminded him of Horatio Hornblower. "I'm still trying to figure that one out," he says.

When he joined, work had already begun on Gorrister's story. "In most cases, the backgrounds were created with a combination of 3D rendering and painting; there was the beginning of a style set for that first story." However, each character's story would be inspired by different visual influences –

Keep Dreaming

More releases from The Dreamer's Guild

The Legend of Kyrandia

1992, PC, MAC, AMIGA

■ The Dreamers Guild ported this Westwood title to Mac in 1993. The adventure is set in Kyrandia, where a young prince, Brandon, must overcome the sorcerer court jester, Malcolm, who murdered the king and queen. The game features bold graphics and inventory-based puzzle-solving, tempering an epic quest with a dose of cheeky humour.

The Labyrinth of Time

1993, PC, MAC

■ This adventure game was designed by artist Bradley Schenck. The player must navigate across a multifaceted maze, spanning across space and time. It mixes and matches imagery from ancient mythology, pop culture and science fiction, paired with a suitably powerful soundtrack.

Inherit the Earth: Quest for the Orb

1994, PC, MAC, AMIGA

■ Inherit the Earth is a point-and-click adventure set in a world where humans have taught animals to think and speak, before leaving the planet. A fox, Rif, must recover a stolen relic with the power to predict storms, accompanied by a boar and a stag.

"In most cases, the backgrounds were created with a combination of 3D rendering and painting"

Bradley Schenck

ranging from fairy tale illustrations to Egyptian art. "When Glenn Price was working on the airship backgrounds for the Gorrister story, I think he watched the film *Zeppelin* over and over again. This stuff was far more difficult back then – we didn't have the web yet."

Benny's story was set in a "biomechanical environment, camouflaged to look like a tropical jungle inside a cavern" – reminiscent of HR Giger's work. Bradley produced most, if not all, the preliminary sketches and backgrounds for Benny's character arc. "For Benny's story, the scanned sketch was the actual foundation for the finished, painted art. But usually we modelled some parts of the scene, painted others, and retouched the renderings to match." At the time, videogame art production was undergoing a major shift from Amiga platforms to MS-DOS and Windows. "In 3D rendering we used Imagine, Lightwave, and a little 3D Studio. The first two were first available on the Amiga, later moving to DOS and Windows. On the 2D side, we used Deluxe Paint, Autodesk Animator, TV Paint, and Photoshop."

The game benefitted from the recent release of the CD-ROM format, without which it would have required 50 floppy disks. "The format gave us a tremendous amount of storage compared to floppy disc-based games. But disc access still wasn't very fast. You had to limit the deltas, or per-frame changes, in an animation if you wanted to stream it from the disc," Bradley explains.

"I had recently done the intro animation for *Return To Zork*. Not long afterward, someone complimented me on the intro's impressionistic style. Well, before it was compressed that animation had been photoreal: it was the massive compression that made it seem so stylised." However, the added space was a double-edged sword, as developers were expected to fill the larger capacity with more data, art and music – with budgets failing to rise as fast. "This was a problem that Talin, one of the Guild's founders, called 'the tyranny of the assets'."

Making the most of the added space, Mullich enlisted the audio expertise of *Usual Suspects* composer, John Ottman and voice-over director, Lisa Wasserman. AM was voiced by none other than Harlan Ellison, who poured melodramatic scorn into every roar and cackle.

Due to Cyberdreams' limited size and resources, neither *Darkseed II* nor *I Have No Mouth And I Must Scream* were hugely profitable. Mullich initially thought *Darkseed* was a superior title. However, he says: "I was proven wrong, as *I Have No Mouth And I Must Scream* was a critical hit and *DarkSeed* was a critical failure". *I Have No Mouth And I Must Scream* won numerous awards, including Computer Gaming World's Best Adventure Game of 1996 and Digital Hollywood's Best Dark Game of 1996. "The honour that most mattered to me," continues Mullich, "was receiving the Best Game Adapted from Linear Media award at the 1997 Computer Game Developers Conference. I still occasionally hear from people who were fans of the game."

» [PC] The final sequence of the game sees the characters attempt to kill themselves, along with AM.

Reviewers praised it as a masterful work of art, combining powerfully dark visuals, excellent sound design and thoughtful, albeit sometimes baffling, puzzle-solving, used to confront troubling dilemmas. Since being rereleased in 2013 and 2016, modern reviewers have praised the game as being far ahead of its time – fitting, given how groundbreaking Harlan's short story was.

Looking back, Mullich says the game was greater than the sum of its parts. Though he would not have done anything differently, he has two regrets. "One is that I wasn't involved earlier on in the game's design." Two? "I never had my picture taken with Harlan. That would have been a nice memento." *

» [PC] Though the best ending offers a glimpse of hope, on a lunar colony, it is notoriously difficult to achieve.

The Legend of Kyrandia: Book 3: Malcom's Revenge

1994, PC, MAC

■ The third title in the *Kyrandia* series plays up the humour, with the player controlling former antagonist, Malcolm. The wisecracking jester is accompanied with canned laughter, as he attempts to prove his innocence of the murder of the king and queen. Though the game boasts decent visuals and multiple paths, the puzzles are notoriously frustrating.

Halls of the Dead: Faery Tale Adventure II

1997, PC

■ This open world RPG was the last game The Dreamers Guild released before shutting down, and was therefore rushed out. However, it boasts beautiful graphics, courtesy of art director Bradley Schenck's decision to hand-paint over 3D rendered images and animations.

RGT

Retro Gamer Travels

LOST IN TRANSLATION

How the rest of the world experienced your favourite games

JPN

FIGHTING VIPERS

JPN → USA
Japan → USA

FORMAT
Saturn

DEVELOPER
Sega AM2

YEAR
1996

ORIGIN
Japan

LOCALISED FOR
USA

REASONS
Commercial, sex

We're not quite sure why, but soft drink sponsorship deals were pretty big business for games in the Nineties. *Cool Spot* shilled 7-Up, *Coca-Cola Kid* promoted – well, you can probably guess that one – and *Virtua Fighter Kids* got the Japanese brand Java Tea. But that wasn't all for Sega's fighting games, as *Fighting Vipers* received a big dose of Pepsi branding. Billboards advertised Pepsi and Picky's skateboard bore the Pepsi logo, but the biggest inclusion was Pepsi's mascot Pepsiman as a playable fighter.

In order to lure Pepsiman into action, all you needed to do was leave the controller alone in an arcade mode fight, and once you'd been pummelled enough, Pepsiman would intervene. Then, if you could defeat the metallic menace, he'd become available to select. He's a pretty good fighter, too, combining some of the best striking moves in the game to devastating effect. The only problem is that the Pepsi sponsorship deal was only valid in Japan – and that meant Pepsiman had to stay at home, with no appearance in the localised versions.

There was also some concern about Honey, the 'cute girl' of the *Fighting Vipers* cast. In Japan, many of the game's secrets revolve around her, mostly in the form of alternate costumes. Beating the game with Honey in normal mode earns you the 'Hawaiian' costume, complete with new ukulele attack. Conquering hard mode with Honey unlocks a schoolgirl costume, as is seemingly traditional in these sorts of games, and if you can achieve victory in very hard mode with Honey, her skirt will come off when her lower armour is destroyed. This was all considered to be rather unnecessary sexualisation for a girl whose age is stated as 16, so again, none of this left Japan – although Sega Europe's advertising still featured Honey with the tag line "Storm in a D cup," so you have to question the commitment to that particular cause.

The last cut was exclusive to the American version. The portrait gallery option featuring CG renders of the characters has been axed completely, and although the images still appear in each character's end sequence, some of those have been replaced. Again, the primary reason is that the game is too sexy, as Grace, Jane and Honey bear the brunt of the cuts, although hilariously Sanman gets a couple – one for a close-up of his ample rear end, and the other for depicting a church. Stills from the intro sequence are usually used in place of the offending images.

FIGHTING VIPERS
Departing: 1996

JPN

» [Saturn] Sega of America didn't like this, because you can see Honey's pants.

USA

» [Saturn] Gamers in America got this image instead, removing any potential underwear flashes.

ELITSERIEN 95

USA → SWE
USA → Sweden

FORMAT
Mega Drive

DEVELOPER
High Score Productions

YEAR
1994

ORIGIN
USA

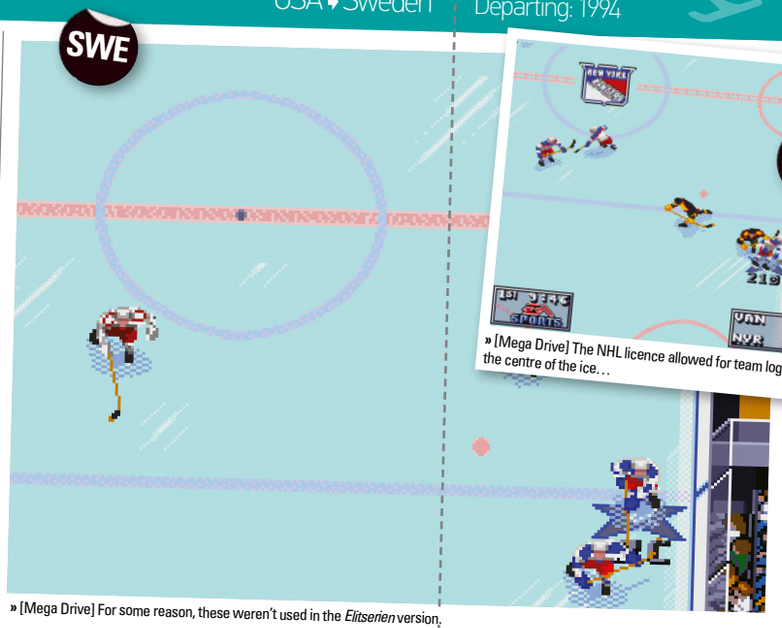
LOCALISED FOR
Sweden

REASONS
Commercial

■ We have an odd soft spot for sports games with incredibly localised appeal. A lacrosse game is never going to gain any traction outside of North America, and *Gaelic Games Hurling* will sell more or less exclusively to Irish people. *Elitserien 95* is just such an oddity – a Mega Drive game that was released only in Sweden, based on the national ice hockey league.

The game is based off *NHL '95* as released everywhere else in the world, but with the likes of the New York Rangers and Montreal Canadiens replaced by Malmö and Modo Hockey. Pre-game analysis was given by Tommy Töpel, a former player and coach turned league chairman, and a new title screen was put in place. As you might expect, all the text is in Swedish, too. However, the actual gameplay is unchanged – the game doesn't even include the wider rinks used in Swedish competition, which are 100 feet wide instead of 85.

Apparently, the game was a major success in Sweden – certainly enough to satisfy Electronic Arts. The publisher delivered *Elitserien 96* the following year on the Mega Drive, and would eventually incorporate the league and its players into its main *NHL* series.



» [Mega Drive] For some reason, these weren't used in the *Elitserien* version.

ELITSERIEN 95
Departing: 1994

» [Mega Drive] The NHL licence allowed for team logos in the centre of the ice…

ECONOMY

GUNBIRD

JPN → ROW
Japan → ROW

FORMAT
PlayStation

DEVELOPER
Psikyo

YEAR
1995

ORIGIN
Japan

LOCALISED FOR
Rest of world

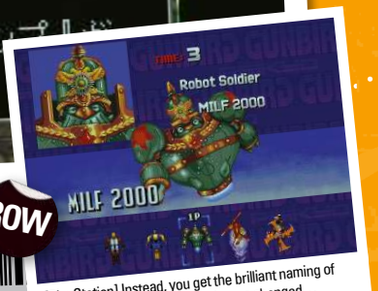
REASONS
Commercial

■ In the early Noughties, the gaming market was still filled with PlayStations. Although the system's heyday was long gone, there were enough late adopters, die-hards and kids who received hand-me-down consoles to sell to – the only problem for publishers was having games to sell to them. To keep development costs down, publishers began to look to Japan and its vast catalogue of games which hadn't yet been localised. This is how XS Games decided to dredge up and localise *Gunbird* in 2003 – an arcade shoot-'em-up port from the early days of the console. The resulting game, *Mobile Light Force*, is notorious.

The box art features a *Charlie's Angels*-style trio of women with guns running through a city, which bears no resemblance to the game at all. The character profile FMVs have understandably been stripped out, but the illustration gallery has also gone and all of the story sequences were removed, despite having existing English translations from the arcade game. Some of the characters were arbitrarily renamed, too – Ash became Jason Last and Tetsu was renamed John Suarez, both of whom were XS Games staff. Oh, and Valnus becomes MILF 2000. Yes, really. Naturally, we'd recommend the Japanese original in this case.

» [PlayStation] All those story cutscenes from Japan? Don't expect those in your version.

GUNBIRD
Departing: 1995



» [PlayStation] Instead, you get the brilliant naming of MILF 2000. We're so pleased this was changed…

ECONOMY

Minority Report

INTERESTING GAMES YOU'VE NEVER PLAYED

PLAYSTATION

Sony's original console was host to a lot of interesting games in the Noughties, but with a new generation of consoles on the market, many were overlooked. Join Nick Thorpe to discover some late PAL PlayStation gems…

» [PlayStation] Up, up and away! This sheep is going for a ride thanks to the big boulder.

» [PlayStation] It's possible to swim about, though the presence of sharks makes this somewhat ill-advised.

SHEEP DOG 'N' WOLF

■ DEVELOPER: **INFOGRAMES LYON HOUSE** ■ YEAR: **2001**

■ **Sometimes, it's fun to be the bad guy – and Ralph Wolf is most definitely the villain of this licensed *Looney Tunes* game.** All Ralph wants to do is steal sheep from under the watchful eye of Sam Sheepdog, but his schemes always fail. Suddenly, Daffy Duck bursts into Ralph's life and tells him that he's the newest contestant on the Sheep Dog 'N' Wolf show, where he's tasked with doing exactly what he's always wanted to do, with the proviso that he's not allowed to harm any of the sheep.

This convoluted premise gives way to a platform puzzle game with prominent stealth elements. In each stage, your goal is to steal one of the sheep under Sam's watch and take it to a goal point. This is usually easier said than done, as it's easy to infiltrate Sam's territory (tiptoeing, hiding behind rocks and camouflaging yourself in a bush all help), but getting back out with a sheep is tricky. Lifting and carrying them usually isn't an option as Sam is astonishingly quick when alerted. Thankfully, products from the Acme Corporation are only a mailbox away. Perfume might lure sheep out from afar, or you could use a flute to hypnotise dear old Sam and draw him away from the flock. Alternatively, lettuce can be used to create a tempting trail for the sheep.

Of course, acquiring a sheep is just one part of the story – you then have to get it back to the goal, which involves all sorts of cartoon shenanigans. In one stage, you might have to push a giant boulder onto a rock to create a see-saw effect, launching the sheep into the air. In another, you may need to tiptoe around noisy piles of leaves in order to avoid waking a raging bull. Typically, the solutions involve using the sheep as unwitting partners in their own abduction – for example, they'll activate switches for you if you can get them in the right place.

Sheep Dog 'N' Wolf was critically praised at its launch, receiving scores of 9/10 from the *Official PlayStation Magazine* and 84% from *Play*, and for good reason. The simple style of the original cartoons is a blessing for the PlayStation's limited 3D capabilities, as the lack of textures and other details allows for some surprisingly large stages and a pretty decent draw distance. Sound is great too – all of your favourite characters from Daffy to Farmer Porky are voice acted, and there's the usual array of brilliant spot effects for being hit with a boulder and other such incidents. Controls are a little fiddly when

IF YOU LIKE THIS TRY...

CHICKEN RUN

PC

■ If you'd prefer a slightly less villainous take on stealth, but one you can still share with the kids, this film licence is a pretty good choice. As in the film, it's your job to get Ginger, Rocky and the rest off the chickens off Tweedy's farm – but this time, in a manner resembling *Metal Gear Solid* more than *The Great Escape*.

BONANZA BROS

MEGA DRIVE

■ If you like the moral ambiguity of sneaky theft but aren't sold on 3D environments, this arcade conversion should serve you well. Stealth is just one of your tools here – you're equally capable of just shooting guards down – but the cartoonish graphics and lack of proper deaths keep this family friendly.

SPACE RACE

PS2

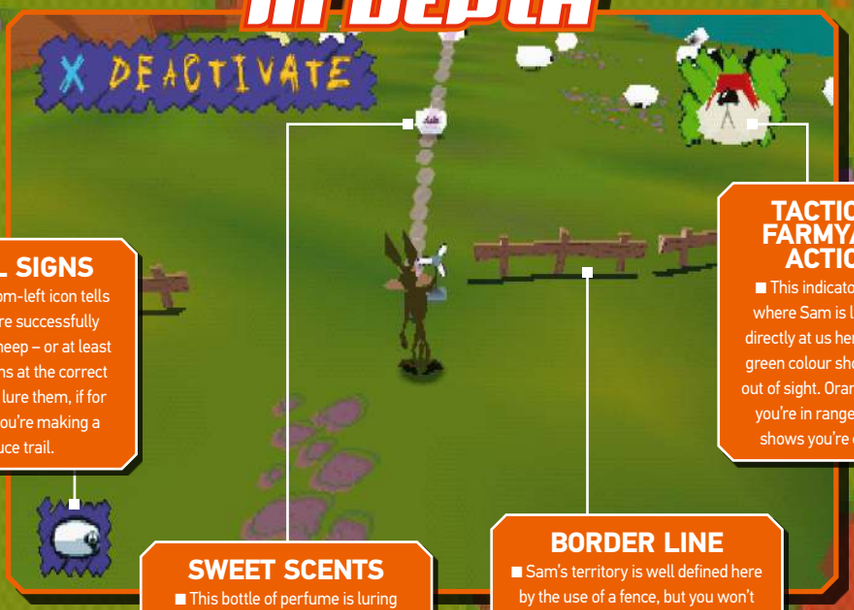
■ If you just want a really good *Looney Tunes* licensed game, this arcade racer is a great choice. The cel-shaded visuals work well to convey the look of the cartoons, and the space setting allows for both crazy tracks and outlandish vehicles – check out the carrot-shaped spacecraft Bugs Bunny is straddling here.

» [PlayStation] Sam has caught Ralph Wolf, who is about to experience a nasty bop on the head.

using the standard controller, but an analogue controller of some kind will sort that problem out swiftly.

It's true that *Sheep Dog 'N' Wolf* might not be the most obvious use of a *Looney Tunes* licence, but that's precisely why we like it so much. Infogrames took something that could have been a cookie-cutter platform game and instead thought about how to blend the characters with popular game mechanics of the day. The result is something that's genuinely funny and memorable, even if not enough of us experienced it the first time around.

IN DEPTH



VITAL SIGNS

■ This bottom-left icon tells you if you're successfully luring the sheep – or at least placing items at the correct distance to lure them, if for example you're making a lettuce trail.

TACTICAL FARMYARD ACTION

■ This indicator shows where Sam is looking – directly at us here, but the green colour shows we're out of sight. Orange means you're in range and red shows you're caught.

SWEET SCENTS

■ This bottle of perfume is luring a sheep into our clutches, but it wouldn't be able to do so without the electric fan to blow its scent towards the unsuspecting flock.

BORDER LINE

■ Sam's territory is well defined here by the use of a fence, but you won't always be so lucky, so it's wise to tiptoe around whenever you venture near him and his flock.

Minority Report

FIREBUGS

■ PUBLISHER: **ATTENTION TO DETAIL** ■ YEAR: **2002**

■ *Rollcage* and its sequel were celebrated futuristic racers on the PlayStation, thanks to their drive-anywhere philosophy that frequently had racers curving up onto cliffs and speeding along the ceilings of tunnels. However, there's a third game that isn't quite in the series, and it's frequently forgotten – *Firebugs*. This PAL exclusive was given as big a promotional push as it could have been in 2002, as it was featured prominently in the *Official PlayStation Magazine* and even appeared on a demo disc given away at McDonalds. However, the late release did it no favours.

This is a shame, because *Firebugs* is a very nice racing game. As you can see, it's graphically accomplished and the soundtrack features licensed music from the Bomfunk MCs (you know, they had that one top ten single, *Freestyler*). The tracks are well designed and there's a solid league mode to run through, the weaponry is interesting and it's all underpinned by the proven *Rollcage* engine. There's even a split-screen mode for two players to race each other.

The only thing that might turn you off is the presentation, which is decidedly aimed at the younger audience – the kids who had inherited PlayStations from their older siblings, and newcomers entering the market via the PSone. Some of the tracks are a little garish and the cartoon drivers aren't going to be to everyone's tastes. However, the game does benefit in terms of accessibility – the *Rollcage* games were pretty unforgiving, so novice racers may want to try this before moving on to the better-known games. It's certainly worth trying before the *Rollcage* series' spiritual successor *GRIP* reaches its full release.

» [PlayStation] Wall-riding returns from the *Rollcage* games, and is as useful as ever on narrow tracks.

» [PlayStation] Those lights in the distance are weapon pick-ups – you can carry two at once.

More Games to Play

» STRIKERS 1945 II

■ DEVELOPER: **PSIKYO**
■ YEAR: **1998**

■ It's a shame that Midas Interactive didn't pick this World War II-themed shoot-'em-up for PAL release until 2002, as it's an excellent example of the genre. What's more, the arcade conversion is good, offering two horizontal screen modes and a tate mode. The game probably wouldn't have fared well in the anti-2D critical climate of the late Nineties though, so it's not a surprise that it ended up as a late budget release.

» BABY FELIX TENNIS

■ DEVELOPER: **SPARK**
■ YEAR: **2002**

■ As you might be able to guess from the licence and the visuals, this is clearly for kids, and the in-game crowd of cheering youngsters reinforces that. However, it plays a surprisingly decent game of tennis – there are a good range of shots available and the various characters have their own strengths and weaknesses. If you've got a kid and they're not quite ready for *Smash Court* or *Virtua Tennis*, this is a great introduction.

» RAGEBALL

■ DEVELOPER: **NAPS TEAM**
■ YEAR: **2002**

■ This ludicrously titled game attempts to add a bit more to the future sports template laid down by the likes of *Speedball*. You can carry the ball and toss it into the air for powerful assisted shots, or run with it at your feet and pass it accurately like a football. Special charged shots also add a little spice to the mixture. It's incredibly chaotic and hard to read at first, but with a bit of practice this can be good fun.

» CLEOPATRA FORTUNE

■ DEVELOPER: **ALTRON**
■ YEAR: **2001**

■ Taito's puzzler is an unusual twist on the falling block formula – your goal is to create enclosures around treasures with stone blocks, and then clear those blocks *Tetris*-style. As well as the regular arcade game, there's a story and a 50-stage Mystery mode that sees you solving fixed puzzles. It was a release that didn't arrive in English-speaking territories until 2003, but it's cheap to pick up now.

ONE PIECE MANSION

■ PUBLISHER: **CAPCOM** ■ YEAR: **2001**

■ **This unusual residential puzzle game was directed by Hideaki Itsuno, better known for his work on the *Power Stone*, *Capcom Vs SNK* and *Devil May Cry* games.** Your task is to achieve various goals by managing an apartment complex – for example, you may need to build a certain number of rooms, allow your tower to reach a specific height, or earn a fixed amount of cash. Rent is earned at the end of each month, from all tenants remaining in the building.

The trick is keeping those tenants in the building, though. Each tenant has their own effect on their surroundings – for example, a sumo might cause stress to neighbours by smashing the walls while training, but a nurse may reduce stress by performing examinations. If a tenant gets too stressed, they'll leave the building, so you'll need to swap them about to achieve the desired effects – but swapping residents and adding new ones all have a cost attached.

However, stress-causing residents aren't all bad. Members of the evil Syndicate 5 will move in and harass your tenants, but if you direct stress at them they'll eventually leave. Additionally, as the manager you can act as security and chase them back to their rooms. Every so often, you'll also be confronted by a boss that moves into your mansion.

If you're looking for a different spin on the puzzle genre, give it a go.

» [PlayStation] These red arrows show where a tenant causes stress – each has their own unique pattern.

» [PlayStation] The guy in the dark room up top is a Syndicate intruder.

RETRO SUNKER

» LION AND THE KING

■ THE CODE MONKEYS ■ 2001

■ A puzzle, a paint package and a terrible film. Children that received this must have wondered what they had done to upset their parents.

» PINK PANTHER: PINKADELIC PURSUIT

■ DEVELOPER: **PUNCHLINE** ■ YEAR: **2002**

■ The Pink Panther hasn't parlayed his cartoon stardom into much of a gaming career, but this platformer was pretty good. The aim of the game is to clear a path to the end of the stage and grab a key and run for it, while chased by the Little Man. Our hero can blend into the background to avoid detection, posing as a life preserver or sarcophagus, in an amusing nod to his cartoon capers.

» DESTRUCTO 2

■ DEVELOPER: **AXES ART AMUSE**
■ YEAR: **2000**

■ This utterly forgotten puzzle game originated in D3 Publisher's *Simple Series* in Japan, but came out here in 2003. You must run around jumping on coloured blocks to clear them, and causing chain reactions – but running past blocks displaces them, allowing them to be rearranged on the fly. Blocks can pile up pretty high but once your character has hit the spiked ceiling, it's game over. Confusingly, there's no *Destructo 1*.

» BALLERBURG

■ DEVELOPER: **ASCARON ENTERTAINMENT**
■ YEAR: **2002**

■ This 3D strategy game is a bit of a left-field hit, named after (but not actually related to) a dusty old public domain Atari ST game. Your goal is to build up your own castle, while attacking the enemy's buildings with catapults. It's a relatively attractive game with some detailed building graphics, but it's complex enough that you'll need to spend a bit of time with it. Despite the late release, this is a pretty cheap game, too.

» EXTREME GHOSTBUSTERS: THE ULTIMATE INVASION

■ DEVELOPER: **SIMILIS** ■ YEAR: **2004**

■ This late PAL exclusive is a lightgun game in which you wander the streets blasting ghosts and zombies. The game borrows the system of dodging to reload, and you have the option of two strong shots, ten weaker ones or a combination. It's an amusing diversion for when you've worn out the *Time Crisis* and *Point Blank* games.

TO T
ANNIHI

In 1997 Cavedog and developer Chris Taylor set out to make a worthwhile entry into the fast-evolving real-time strategy wargame genre. What they created turned out to be revolutionary. Total Annihilation would change RTS wargaming forever

Words by Erlingur Einarsson

» [PC] Assigning a detail to guard the Commander is important, especially after you discover 'Command Napping'.

***Total Annihilation* came out at a time when videogames, and RTS wargames in particular, were evolving exponentially.** This is a gaming genre perhaps more reliant on processing power than most other games, so real development essentially had to wait for computers to 'catch up' with the ideas that were out there. Around the mid-Nineties, PCs were finally acquiring the sort of graphic capability needed for an upturn in strategic complexity, and battle scale and scope, as well as bearing witness to the birth of online gaming. And it was that world *Total Annihilation* creator Chris Taylor was waiting for. We caught up with Chris and asked him where the idea for the game came from.

"It evolved from a bunch of experiences that I had while developing games for most of my childhood, but there was a moment, while I was playing the original *Command & Conquer* where I saw many of the ideas coalesce," Chris says. "For example, I was always a very big proponent of doing things in true 3D, but the computers just couldn't handle it. I had developed many techniques for sort of 'tricking' the computer into making it look 3D and saving a lot of calculations. And what's kind of crazy is that I developed a lot of these while working on baseball games like *Hardball II* and *Triple Play Baseball*. Anyhow, it's a lot of factors that all lead up to a moment where you have an idea for a game."

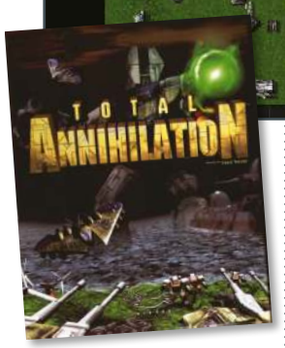
» [PC] *Total Annihilation* offered new grouping tactics, emulated in countless RTS wargames since then.

Total Annihilation didn't sit alone at this new feast. It came out in an era where RTS wargames were surging within the videogames industry, with *Z* and *Command & Conquer: Red Alert* having come out in 1996, and *Total Annihilation* sharing 1997 with games like *Age Of Empires* and *Dark Reign* before *StarCraft* came out in 1998. However, *Total Annihilation* enjoyed immediate success and the kind of glowing reviews any games studio would dream of. But was it helped by the general popularity of RTS games at the time or the other way around? And how much does Chris think *Total Annihilation* helped the RTS genre, and thus other RTS games?

"That's something I can only speculate on really. I totally agree that having all those RTS games come out around that time made the RTS genre very popular, and top of mind [with gamers and the media at the time]. I don't know how much *TA* contributed to the genre's success, but I think more specifically it helped advance the idea that a RTS could be 'over the top and insane' and have more advanced control schemes. This is something I am still passionate about today."

And indeed, *Total Annihilation* was considered revolutionary in many ways, such as with improved AI, new grouping techniques, sheer scale of the battlefields and skirmishes, and of course the Commander unit. It offered a level of control beyond the already sophisticated one provided in *C&C: Red*

T A L LATION N

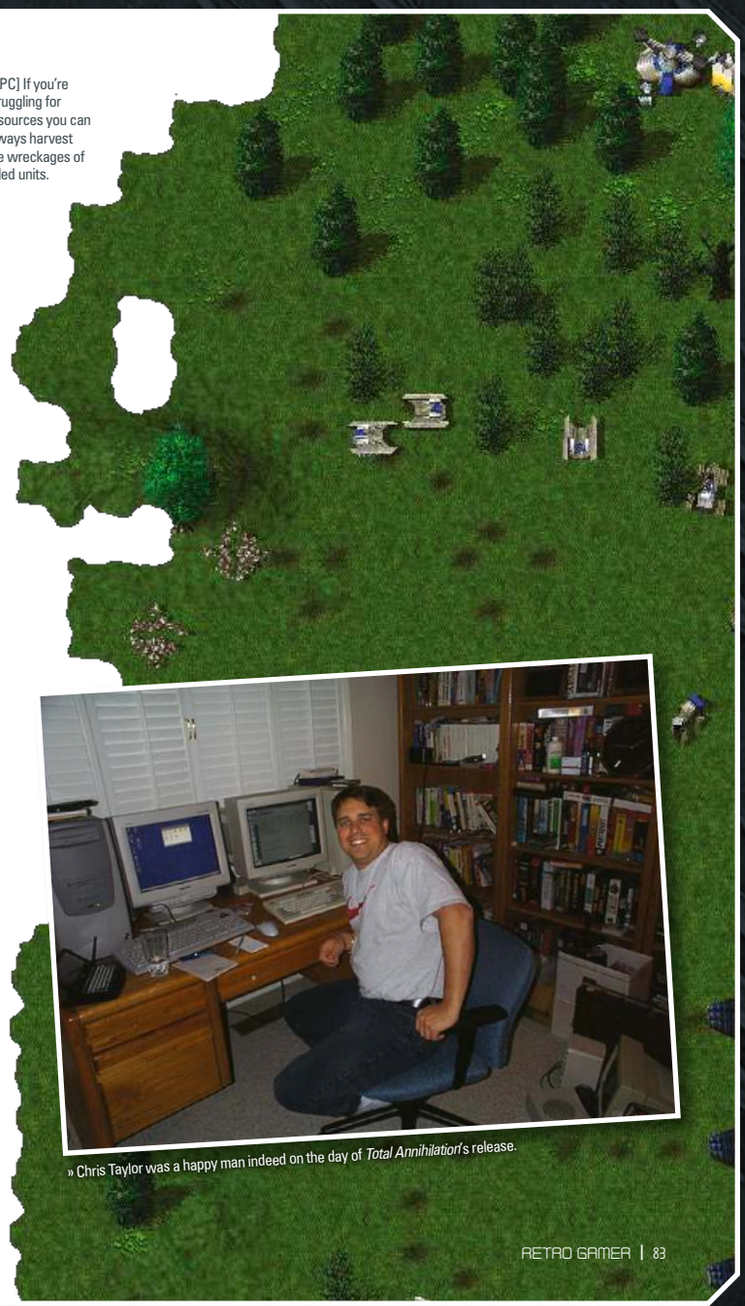


IN THE KNOW

- **» PUBLISHER:** GT INTERACTIVE SOFTWARE
- **» DEVELOPER:** CAVEDOG ENTERTAINMENT
- **» RELEASED:** 1997
- **» PLATFORM:** PC, MAC
- **» GENRE:** REAL-TIME STRATEGY

Alert, and the introduction of the Commander, a central, all-important unit, to the battlefield was a big hit at the time, and Chris remembers the classic inspiration for it clearly.

"I always believed that RTS was a true strategy game, and having played a bunch of chess, I felt there was a place to insert some of that," he says. "But besides needing a king on the board for the enemy to focus on, the player needed an avatar, a place to feel like they are connected to the game experience. I imagine I wrote something like this in the design, 'The player needs to feel like they are part of the game, and the Commander accomplishes that.' I'm paraphrasing, but you get the idea. Although, one could argue that it really didn't accomplish that, per se, but it did give the player a sense of, 'hey, don't mess with my Commander, or there will be trouble!' It makes the game more personal. So, if you follow the design logic and say that if the Commander dies, the game is over, then the Commander needs to be powerful, and so you have it, the Commander was born." However, placing a metaphorical king onto the field of battle came with some unintended consequences. ▶



» [PC] If you're struggling for resources you can always harvest the wreckages of killed units.

» Chris Taylor was a happy man indeed on the day of *Total Annihilation*'s release.

TAKING IT TO THE SUPREME

How Supreme Commander carries the TA spark

Despite its fame, and a few earnest attempts by other developers who picked up the rights to the game after Cavedog's collapse in 2000, the world has never – and will probably never – see a sequel to *Total Annihilation*. However, Chris Taylor designed 2007's *Supreme Commander* during his time at Gas Powered Games. Both he and the gaming world see *Supreme Commander* as a clear spiritual successor to *Total Annihilation*. It had the intergalactic stakes. It had a very similar level of immediate accessiblity balanced with sophisticated tactics. It had the immense scale. And it did allow Chris to work on some specific elements of *Total Annihilation* that he wanted to take further than before.

"I think *Supreme Commander* had to be bigger and more awesome in every way. I think the Strategic Zoom brought a lot of that to the game; it's really hard to imagine *Supreme Commander*, and the epic size and scale of the game really working without Strategic Zoom. Then everything else in the design followed suit. Nothing had to fit within the confines of the screen anymore, because you could just zoom out further until it fit. Units could be huge and have guns all over it, the Fatboy was the embodiment of this. Speaking of which, the concept of Experimental Units went from the one-off of the Krogoth in *TA* [a super-heavy Commander-killing KBot included in the *Core Contingency* expansion pack], to a whole new technology tier. Nukes and Anti-Nukes went to the next level as well. Everything went crazy and over-the-top, which I think worked pretty well, because I don't always recommend that to people when designing games. Regardless, *SC* needed to be huge and awesome and insane, and I think that worked out."

It was certainly a hit with the critics, scoring in the high-80s to low-90s for most of them, and sold well enough to spawn two expansion packs in 2007 and 2008, and a full sequel in 2010. We do strongly advise you go with the original PC version rather than the Xbox 360 port, though.

> **"I did like the idea that one side was slightly more evil, but not too evil, and that is obviously the Core"**
> Chris Taylor

"There was a lot of stuff packed into the game. We were pushing the boundaries in as many areas as we could, and when we stopped, we just picked that up where we left off with *Supreme Commander* (which came out in 2007). As for the challenge of balance, that was handled by Jacob McMahon, who although had never done that kind of work before, did a fabulous job, and spent hours and hours poring over the numbers to balance the game. The Commander added an extra wrinkle, and in some ways needed special attention… and yet, 'Command Napping' still snuck past us! We never saw that coming."

What Chris refers to here is the rather extraordinary concept of 'Command Napping', as it was referred to by the *TA* community. As the success of your campaign often relied on your Commander surviving and being active, it would become a tantalising target for opportunistic players. Nigh-unkillable as it was in a firefight, some devious, yet ingenious, gamers found a loophole to taking the Commander out of the game: build an air transporter, such as a Valkyrie or Atlas, fly it over to the enemy Commander, pick it up, and then just fly the aircraft to the far edge of the map, rendering it useless to the opponent, thus crippling their building and development capabilities, which relied heavily on the Commander. Yes, it would have required building several dozen aircraft in the hope that one survived long enough to pick the Commander up from deep within its own territory, but if you pulled it off, it didn't just give you and advantage; it gave you a sense of great villainous joy.

This was merely one of the ways in which *Total Annihilation* dedicated player base found ways to get the most out of the game and its hundreds of units. In many scenarios, especially for experienced players, one side, Arm, would find a tactical advantage over its opposing side, Core. That, Chris explains, was also unintended: "We never intended for one side to be more powerful than the other. We had always planned (and did for quite a number of months) to release new units, which we believe would continue to shift the balance of power back and forth between the two factions each week. I think that sort of worked." For those with a taste for the ruthless, *The Core Contingency* expansion featured 75 new units, including devastating, balance-reinstating Core units.

The story was very 'out there', especially in a field that had been dominated by either Earthbound World War narratives or high fantasy. It was also extremely simple at its, ahem, core. There are two sides, more or less a good versus evil adventure, featuring a main campaign where you could pick a side. And Chris readily admits the design very much drove the story, rather than the other way around, although, "I did like the idea that one side was slightly more evil, but not too evil, and that is obviously the Core."

When *Total Annihilation* came out, it was an instant success, both critically and commercially, and it took Chris – and the Cavedog management – by surprise. "I believe it sold almost 500,000 units in the first four-to-five months and that blew people's minds," Chris says. "That was 20 years ago, which was a different time than today with the distribution of Steam and GOG." This was especially gratifying, as *TA* was Cavedog's first (and unfortunately also ended up being its last)

» [PC] The environment played an important role, as you could seek temporary shelter among trees or gain higher ground.

full game release, and the development had been a challenge, in particular the schedule, as Chris explains: "Time and reflecting on the past changes things. I feel like it was working seven days a week for 20 months. That was hard, but maybe the more metaphysical challenge was just getting everyone on the team and in management to keep the faith. Holding that vision together with all the different people and personalities was difficult on an entirely different level."

Even today, 21 years after its original release *Total Annihilation* is still played by a large number of players. As to the question of what the reason for that might be, Chris says, "That's a tough one to answer, but ultimately maybe there's a comfortable familiarity to it, especially if it was one of the first RTS games that you played in your youth. And then if you try to play a more modern RTS they can be overwhelming and you need to learn all the new units, which is a lot of work. I think gaming should be about fun, not work, so it's just more fun to play something you know and understand and can just jump in and enjoy. I think there is also something about the graphics that make it accessible, kind of like *Minecraft* with the 8-bit stylised graphics. Even I don't love modern games when they throw a ton of complex gameplay at me, I like to take it a little slower. But that's not a hard and fast rule, it's just me talking out loud here!"

Finally, Chris ponders if he were to make *Total Annihilation* again from scratch today, apart from having larger and more capable graphics engines at his disposal, whether he would change anything from the original incarnation.

"I'd try to stick to the core design," he says. "I would resist the urge to just make it huge and over-the-top, although that would be so incredibly tempting. I think it would be important to really talk to the community and see what they are looking for and take that input very seriously. It might be great just to kind of go through a wishlist of things and then more naturally look for places to expand the game, ie add flow-field pathfinding, improve mod tools, fix weapon limits, add more AI capabilities, make the simulation lock-step synchronous, and make a state-of-the-art multiplayer and matchmaking server. I think there is a ton of cool things you could do before you even change the core gameplay, but eventually you'd really want to take a hard look at that and find new ways to take it to the next level… without messing it up!" ✱

Wind Speed : 1359
Gravity : 1.9
MISSION 1.00 ARM
Establish a guard detail around the Galactic Gate
PRIORITY CRITICAL
Core agents have somehow breached our security and are on Empyrean. Worse yet, the Commander is off-planet and Core waits in ambush near the
MORE...

» [PC] Coming out in 1997, *Total Annihilation* was a standout in a suddenly crowded genre of RTS wargames.

» The Cavedog dev team from around the time of the making of *Total Annihilation*.

EXTRA ANNIHILATION

The expansion packs

THE CORE CONTINGENCY

■ The success from the game's initial release afforded Chris Taylor and the Cavedog team an opportunity to expand the *TA* universe, and with *The Core Contingency* expansion pack, they introduced a staggering 75 new units, 53 new battle maps and a 'lost mission' from the original game's timeline.

BATTLE TACTICS

■ The second expansion pack, *Battle Tactics*, was made after Chris Taylor's departure from Cavedog, and received mixed reviews, as it deviated in some ways from the revolutionary economy system of the original game and required more micromanaging in battle, although it did offer a new way to interact with the *TA* universe.

» [PC] The resource-rich, all-metal maps of the Core world were the perfect scene for mahoosive mega-battles.

» [PC] You could assign units to patrol areas and set their aggressiveness level and freedom to roam along their route.

THE UNCONVERTED

Arcade games that never made it home

TH STRIKES BACK

DEVELOPER: **GAELCO** YEAR: **1994** GENRE: **RUN-AND-GUN**

Sometimes, a game just needs to deliver a ludicrous power fantasy. All you want is a hulking, shirtless dude running around blasting aliens with a big laser gun – and that's exactly what *TH Strikes Back* delivers. The game is the sequel to 1992's Thunder Hoop, a promising but somewhat flawed run-and-gun that suffered from a rather uneven difficulty level. *TH Strikes Back* is bigger, brasher and better designed than its predecessor in all regards.

There's nothing tremendously innovative about *TH Strikes Back*, but it's a polished execution of a popular genre. As expected, the majority of your time is spent blasting enemies en route to a showdown with an end-of-level boss, although the game has a heavier emphasis on platforming challenges than the likes of the *Metal Slug* games. You'll find rails to hang from, conveyor belts to impede your progress, and spring platforms to cross chasms, and there's even a challenging obstacle dodging section on a small moving platform. Enemies are sufficiently varied, too, ranging from standard humanoid grunts to flying beasts and even guard dog-style baddies, all of which explode into a satisfying shower of bits when shot. Bosses are interesting from the off too – even the first one has four attack patterns, a shielded area and help from regular grunts.

While the guitar rock soundtrack isn't particularly memorable, it does fit the action well. However, the graphical detail is pretty impressive. The cartoon aesthetic is strong and although the environments are predominantly industrial, there's a good splash of colour thanks to the diverse nature of the enemies. There's a good amount of detail in both the sprites and backgrounds, with cool minor details such as rats scurrying about that add a lot of character.

TH *Strikes Back would* have made a fun home release in the early days of the 32-bit market, before 3D games had properly come to dominate the market. However, Gaelco had not yet begun its ultimately limited involvement in the home market (that would wait until 1998's *Radikal Bikers*), meaning that the game unfortunately remained exclusive to the arcades.

It looks like this boss is walking away from you, but he's actually advancing towards you backwards, to take advantage of his thickly shielded back.

This boss fight takes place across two levels, as you can see from the grunt just making the jump up from the bottom level to the top here.

Timing your moves across this pit is important – the flames here are part of a burst that will rise up and impede the progress of our hero.

These platforms are actually big springs, which can propel you across this spiked pit – but only once you've cleared the path of those flying enemies.

CONVERTED ALTERNATIVE

CYBER-LIP

1990

SNK's run-and-gun is set on Earth instead of in space, and involves blasting robots instead of aliens. However, the combination of the genre with sci-fi themes is intact. It's only available on SNK hardware, but for people who can't stomach Neo-Geo cartridge prices, there's a CD version available.

WAR: FINAL ASSAULT

DEVELOPER: **ATARI GAMES** YEAR: **1999** GENRE: **SHOOT-'EM-UP**

■ **In this multiplayer 3D shooter, you can choose to play in two different ways – and the one you choose will depend on how much you like your friends.** If you're constructive people who want to achieve a goal together, you can take on the Campaign mode, in which you team up to fight against CPU enemies and bosses across eight stages. If you're the competitive type instead, you'll probably plump for the Head To Head mode in which you shoot each other.

We have a soft spot for this one, and not just because it offers a third-person mode that prevents motion sickness sufferers from throwing up on us. There are plenty of weapons to find and characters to unlock, granting a bit of variety. What's more, the control system is a well-constructed substitute for PC controls – buttons replicate keyboard movement, while a joystick and trigger substitute for the mouse effectively.

A conversion of *War: Final Assault* was announced for the N64 by Midway Games in late 1998, before the arcade game was completed, but cancelled just five months later for unspecified reasons. That's a shame – it could have been a nice alternative to the likes of *Turok*.

» [Arcade] This boss has brought a sword to a gunfight, which is an incredibly stupid thing to do.

CONVERTED ALTERNATIVE

OUTTRIGGER

1999

■ It's astonishing that AM2 and Atari Games came up with such similar spins on a rare arcade genre in the same year, right down to getting time extensions by killing enemies, allowing third-person play and even non-standard controls. This conversion is exclusive to the Dreamcast.

CONVERTED ALTERNATIVE

FINAL FIGHT

1989

■ Capcom's brawler offered basically everything that *Silent Dragon* does but a few years earlier and a good deal better. If you want to pick it up, it's available on everything from the old home computers to the SNES, Mega-CD and Game Boy Advance, and even modern emulated collections.

SILENT DRAGON

DEVELOPER: **EAST TECHNOLOGY** YEAR: **1992** GENRE: **BEAT-'EM-UP**

■ ***Silent Dragon* is one of those games that doesn't really do anything wrong, but is so uninspired as to be completely unremarkable – this is really about as standard as beat-'em-ups get.** However, given that the developer's previous work in the genre was the miserable *Double Dragon 3*, that's a step up. A damsel named Catherine has been kidnapped by bad guys, and you can choose between one of four martial artists to go out and rescue her. Wouldn't you know it, one of them is dating this lady, and another happens to be her brother.

As is usual, you amble along the streets beating up thugs, smashing up crates and vending machines to get power-ups. The only things that particularly distinguish the game are some interesting boss designs (including an odd-looking primary antagonist) and the common sight of dynamite in the streets, complete with plunger-activated detonators. Dynamite is surprisingly hard to use, as the enemies can move as the fuse is lit, but it is satisfying when it all comes together. We have no idea why this one never came home, but we're not worried – after all, we already had conversions of *Double Dragon* and *Final Fight*.

» [Arcade] This scene is generic enough that it could any brawler, but we assure you this is *Silent Dragon*.

BEST LEFT IN THE ARCADE

DEER HUNTING USA

DEVELOPER: **SAMMY** YEAR: **1999** GENRE: **LIGHTGUN SHOOTER**

■ **Putting aside any moral objections we might have to the concept of shooting wild animals, the problem with *Deer Hunting USA* is that it's just not a particularly good game.** After picking your gun and location, your task is to kill a deer at each point on the map – failure costs you a life.

In practice, this means that you get to watch a prerendered deer sprite on a rubbish digitised background, then attempt to shoot it once you've identified a vulnerability. These sequences last a matter of seconds, and if you're successful you'll be rewarded with a poor quality pre-rendered animation of a deer barrelling over as it's shot – even if it actually died sadly limping along, bleeding out from a wound in a non-vital area. The deer can flee, but only to the left or right because this is a 2D game.

If you're really into the whole hunting thing, *Big Buck Hunter* and the Cabela's series are better options in the arcade and the home.

Atari Jaguar fact

■ The Atari Jaguar may have had a short commercial life but the system's casing at least lived on in the form of a dental camera manufactured by Imagin Systems.

PROCESSOR: 'TOM' CHIP 26.59 MHZ
RAM: 2MB ON A 64-BIT BUS WITH 4 16-BIT FAT PAGE MODE DRAMS
GRAPHICS: 32-BIT RISC ARCHITECTURE, 4 KB INTERNAL RAM WITH SOFTWARE-BASED GRAPHICAL EFFECTS
AUDIO: 'JERRY' CHIP 26.59 MHZ
MEDIA: ROM CARTRIDGE (UP TO 6MB)

Atari Jaguar

» **MANUFACTURER:** Atari Corporation » **YEAR:** 1993 » **COST:** £229 (launch) £80+ (today)

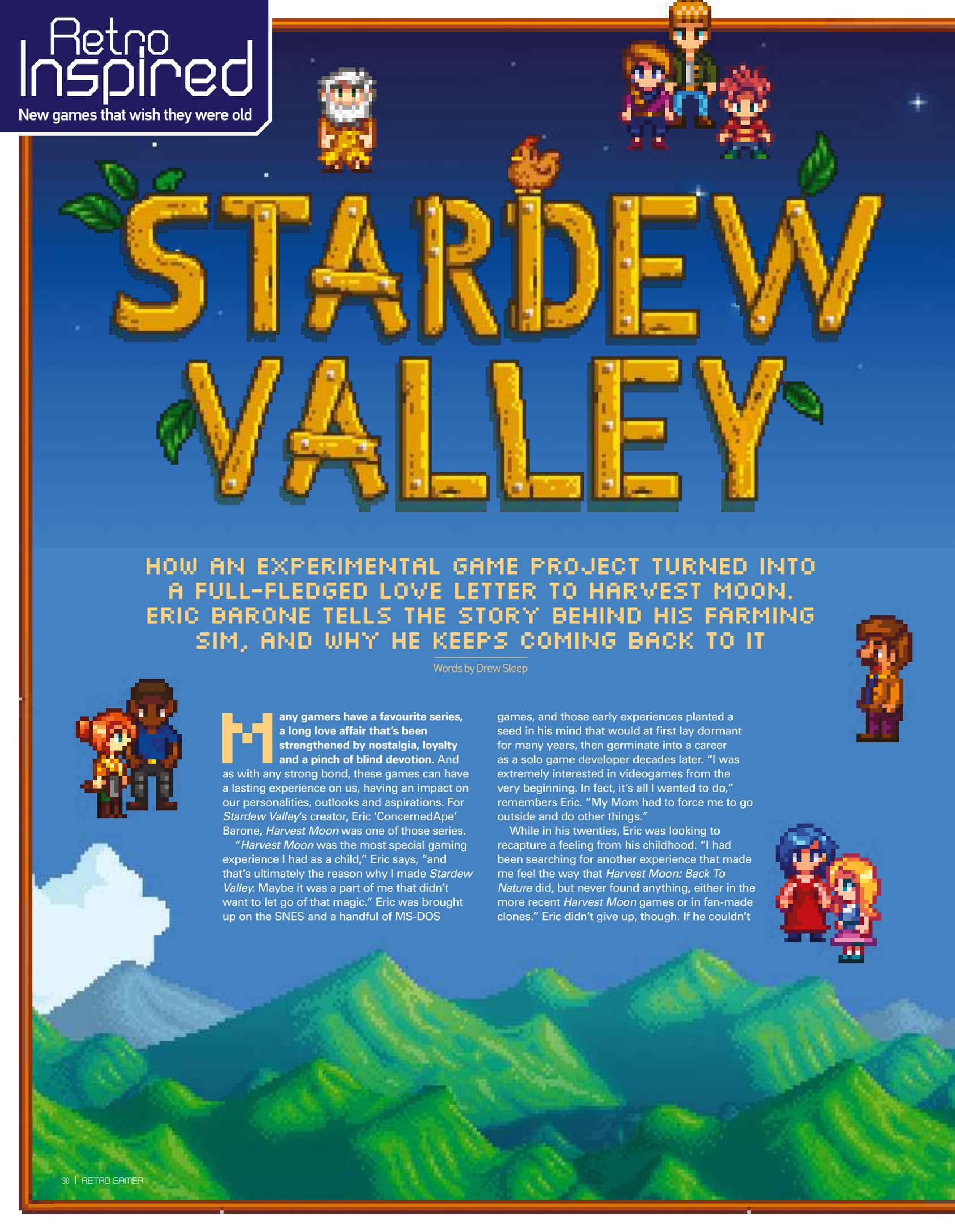
Atari Corporation's last console is a fascinating one. It has a rabid fan base that comes close to the Dreamcast in terms of its sheer ferocity for championing the system, but the Jaguar is also equally unfairly derided as being a spectacular car crash of a console that was doomed from the start. Both of those viewpoints have done nothing to soften the negative image that Atari's console has built up over the years and the truth lies somewhere in the middle of those two polarising views.

Regardless of whether you sit in the 'Jaguar was the first true 64-bit console' camp or not, there is no denying that Atari's machine was a powerful bit of kit at the time of its release and Atari Corp released it at a competitive price as well. It wasn't enough, though and despite some solid looking 3D games and some quality conversions of older 16-bit classics such as *Flashback* and *Zool*, Atari's console failed to gain traction. Even a later CD-ROM add-on couldn't inject life into the system and it was eventually discontinued in 1996.

The relatively short commercial life of the system, and the fact it was Atari's last console, has now made the Jaguar a rather desirable console from a collector's point of view and the system and games are now rising in price as a result. With the machine rapidly approaching its 25th anniversary it's the perfect time to discover Atari Corp's hardware swan song.

EDITOR'S CHOICE Tempest 2000

It's a clichéd choice for sure, but Jeff Minter's eye-blistering update of *Tempest* really is as good as everyone says it is. With a soundtrack that's every bit as intense as the game's blisteringly fast pace, *Tempest 2000* is an astonishingly good tube shooter that not only highlights the strength of Dave Theurer's original game design, but also Jeff Minter's deftness at taking those existing mechanics and refining them for a new system and more expectant gamers. A true triumph every Jaguar owner needs to own.



STARDEW VALLEY

HOW AN EXPERIMENTAL GAME PROJECT TURNED INTO A FULL-FLEDGED LOVE LETTER TO HARVEST MOON. ERIC BARONE TELLS THE STORY BEHIND HIS FARMING SIM, AND WHY HE KEEPS COMING BACK TO IT

Words by Drew Sleep

Many gamers have a favourite series, a long love affair that's been strengthened by nostalgia, loyalty and a pinch of blind devotion. And as with any strong bond, these games can have a lasting experience on us, having an impact on our personalities, outlooks and aspirations. For *Stardew Valley*'s creator, Eric 'ConcernedApe' Barone, *Harvest Moon* was one of those series.

"*Harvest Moon* was the most special gaming experience I had as a child," Eric says, "and that's ultimately the reason why I made *Stardew Valley*. Maybe it was a part of me that didn't want to let go of that magic." Eric was brought up on the SNES and a handful of MS-DOS games, and those early experiences planted a seed in his mind that would at first lay dormant for many years, then germinate into a career as a solo game developer decades later. "I was extremely interested in videogames from the very beginning. In fact, it's all I wanted to do," remembers Eric. "My Mom had to force me to go outside and do other things."

While in his twenties, Eric was looking to recapture a feeling from his childhood. "I had been searching for another experience that made me feel the way that *Harvest Moon: Back To Nature* did, but never found anything, either in the more recent *Harvest Moon* games or in fan-made clones." Eric didn't give up, though. If he couldn't

» [PS4] Restoring Pelican Town's community centre is a big part of the game. You'll have some help from curious Junimos, though.

find the game he was looking for, he decided he'd just have to *make* it himself. "I started making *Stardew Valley* to try to fill that void. It was the game that I desperately wanted to exist but could never find."

Eric decided to go at it alone. While he had no formal experience in game design, Eric had in the past tooled around and made a few experimental games, just for fun. "I dabbled with a few game-making engines like RPG Maker, Flash and Adventure Game Studio, simply because I enjoyed creating things and I thought it would be cool to make something interactive," he says. "Then, during college, I coded some simple games from scratch mainly to become better at programming. I toyed with the idea of making some simple games and sharing them online, but I never imagined that I would go on to make a big game like *Stardew Valley*." Eric had also made music in his teenage years in a band and used to frequently doodle – although he had not worked with pixel art before, which he describes as "whole different ball game from pen-and-paper drawing". He thought he'd finish his game in six months, a deadline he would end up overshooting by four years. At this point, Eric was working on the game as a hobby, like the games he'd made in college, and had no goal of becoming a full-time game developer. "Much of my original intention was simply to get better at programming," he reminds us. "But when the game started becoming more complex, and I started seeing more potential in it, my ambitions grew."

"I WAS INTERESTED IN VIDEOGAMES FROM THE BEGINNING"

Eric Barone

If you come away with anything from playing a few in-game days of *Stardew Valley*, it's the sense that someone has poured their heart into it – that feeling comes through in its finer details, and its relatability. The game starts off with your player-made avatar in a crushing dead-end office job, working for the retail corporation JojaMart. You character, who has finally had enough, opens a letter from their grandfather which tells them that they've inherited his farm in Stardew Valley, a serene pastoral paradise where life is a lot more slower and more down to earth. Your character immediately packs up and leaves. It taps into a frame of mind we frequently find ourselves in. After all, who *hasn't* had thoughts of turning away from their life and starting afresh?

Upon reaching the family farm and meeting Pelican Town's mayor Lewis, you find that your new home is a little overgrown, to say the least. And it's here your new life begins. Day by day, you clear

» [PS4] Pelican Town frequently holds events, such as festivals where you can showcase your produce.

» [PS4] Everything you do depletes your energy bar, but craftable automation machines – like sprinklers – help do some of the work for you.

MAGIC FROM MIYAZAKI

How Eric drew inspiration from the work of Studio Ghibli

There's an undercurrent of mystery surrounding the sleepy pastures of *Stardew Valley*. There have been sightings of tiny, playful creatures in the ruined Community Centre. And there's a menagerie of odd monsters lurking in the mines, including bouncing sprites made from soot, which bare a resemblance to some recurring creatures from animator Hayao Miyazaki's films: the Susuwatari (or 'Soot Gremlins') from *My Neighbor Totoro* and *Spirited Away*. "I'm a fan of Studio Ghibli/Hayao Miyazaki... as a kid I remember checking out *My Neighbor Totoro* from the public library many times," Eric says. "You're correct that the dust sprites are a nod to the Soot Gremlins. And there's a *Howl's Moving Castle* reference in the game, too. Studio Ghibli has been a very big influence on my style."

SPEED DATING

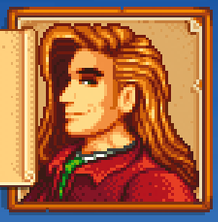
You can befriend anyone, but here are the folk you can strike a special bond with

ABIGAIL
■ Daughter to store owner Pierre. Abigail has a strained relationship with her mother who wants her to ditch her 'alternative lifestyle'.

ALEX
■ The town's jock, Alex spends a lot of his time talking about sports and generally being outside of his grandparents' house.

» [PC] You are free to build the farm you want to. Do you *really* like pumpkins? Then be a pumpkin farmer. Go nuts.

ELLIOT
■ A reclusive writer and a romantic, Elliot looks like he belongs on the cover of a pulpy Eighties romance novel.



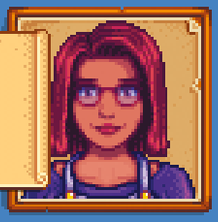
EMILY
■ Pelican Town's aspiring sartorialist, she lives with her sister, Haley and works at the local watering hole.

HALEY
■ Emily's sister may appear to be a bit conceited and abrasive, but perhaps there's a more open-hearted person underneath?

HARVEY
■ The local sawbones. Harvey has a few years behind him, and has a bit of sadness behind those glasses of his.

LEAH
■ You'll find Leah frequently scrounging for berries in the fields. She has a secret talent, but what could it be?

MARU
■ A prodigy, Maru is the local tinkerer and is usually found helping out with odd jobs or fiddling around with a gadget.



PENNY
■ A diligent schoolteacher, Penny is frequently spotted tutoring the local children. She's shy, but has big plans for her future.

SAM
■ Sporting the hair of a Super Saiyan, Sam is a music aficionado and wants to start a band with his pal Sebastian.

SEBASTIAN
■ If Sam is a Super Saiyan, Sebastian's sports the look of a *Final Fantasy* protagonist. He's something of a rebel.

SHANE
■ He doesn't give off the best first impression, being mean and hostile towards your avatar, but he can't *always* be like that, right?

out the deadwood and overgrown grass, making space to plant, nurture and eventually sell your own crops. This leads to profit, and profit is good because you can expand your farm by building animals and shelter, this leads to more funds which you can use to extend your homestead. By then, you're caught in the loop: it's hopeless, *Stardew Valley*'s roots have grown into your soul, and the compulsion to play 'just one more day' is as strong as taking a breath.

That's not to say it's all farming, though. You have townspeople to meet, befriend and potentially even marry, a mine full of monsters to plunder, verdant fields to scrounge, stretches of water to fish from. There's so much to do it almost seems daunting at first, but if you just take it day by day you'll soon settle down. The breadth of quality activities to partake in is astounding and it's all down to one devoted developer, who plugged away at the game, every day for four-and-a-half years.

Eric had set out on the path making a game in the vein of *Harvest Moon*, but that's not to say he drew inspiration from solely that series alone. "All the videogames I've ever played helped create *Stardew Valley*," Eric tells us, citing the likes of *Super Mario RPG*, *Chrono Trigger*, *Earthbound*, *The Secret Of Mana*, *Link's Awakening* and *Hero's Quest* as the gaming vanguard of his childhood nostalgia. "I tend to be pretty analytical and critical when playing games, and I constantly take mental notes about things I like or don't like," Eric adds. "All the gaming experiences of my life shaped the game designer that I am today."

" I'LL ALWAYS BE ABLE TO COME UP WITH COOL NEW IDEAS FOR IT "

Eric Barone

It must be difficult to grow old...
I'd rather not think about it.
It's just a different part of life.
That's why we should respect our elders.
I'd rather die young...

» [PS4] While it is a laid-back game, *Stardew Valley* does touch on deeper themes. Each character has their own fears and desires.

Development was a trying process. Eric is a self-professed "solitary person" and wanted to realise his vision by his own hand. This meant he had to tackle everything about *Stardew Valley*, from coding, to writing, art, music, design and QA all by himself. Indie publisher Chucklefish would eventually come on board to help with publishing duties, but for the majority of *Stardew Valley*'s development, it was all Eric – and it more or less took up his entire life.

"The most challenging part of actual development was probably creating the characters. Eric says when we ask what was the most difficult part of the game's development. "There's just so many of them, and they each have sprites, tons of dialogue, schedules, portraits with different expressions, and event cutscenes. It was a lot of work, and became tedious at time." And he's not joking around, you can view the many iterations that each character went through on websites such as the *Stardew Valley* wiki. In the case of the character Penny, for example, her character art went through at least 11 versions. Eric also cites a more personal issue he struggled with. "Outside of development, there was also the psychological struggle of watching my peers getting good jobs and making progress in their lives while I was chasing what seemed like a very unlikely dream. It all worked out though."

That's not to say Eric didn't enjoy the process: the truth is quite the opposite, in fact. Eric cites one facet of game development he enjoys the most, "My favourite part of development is probably to make music. Composing has always been a passion of mine, so that part of the game came easy to me and was actually a way I would relax and take breaks from the more tedious aspects of game development. I also like how 'direct' of a medium music is... more than anything else in game development, it sets the mood and directs the emotions."

The hard work paid off, and *Stardew Valley* is name-checked as not only one of the best life sim games, but as one of the best titles to come from the indiesphere. It currently sits with a metascore of 89 and has been ported to all modern consoles – most recently the Vita. Eric isn't done with it, though. He's still adding content and polishing his game via regular updates. The community surrounding the game is vibrant, and Eric patiently listens to its criticism and wants. Currently, Eric is working on implementing a multiplayer element to the game, so fraternal farmers can drop in and out of one another's homestead to lend a hand. It's currently in open beta for the PC version. "I keep coming back for a couple reasons," he says. "For one, there's so much potential in the game, and I'll always be able to come up with cool new ideas for it. Second, the game is popular and I don't want to let my fans down... I like making people happy.

"I think I'll always leave the book open, because I can never predict how I will feel in the future. There have been times after release that I wanted to step away from *Stardew* forever, but then six months later I had a change of heart and started working furiously on a new update."

So does Eric feel he's achieved his original goal? And would Young Eric enjoy playing it? "I'm very happy with *Stardew Valley*... especially the amount of fun, happiness and comfort it's brought to so many people," he concludes. "Even though I made the game, and should be sick of it, I still enjoy playing it myself from time to time. I never thought that would be possible. I think my younger self would've loved the game."

» [PC] You can make a living being an explorer; the materials that slain monsters drop can fetch a good price when sold in bulk.

ALAIN FERNANDES

In a career spanning 35 years Alain Fernandes has programmed games and apps on a huge range of consoles and computers. From Oric to Nintendo DS, it is time to look back with Alain

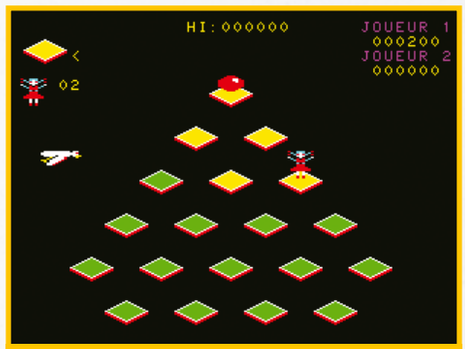
Words by Andrew Fisher

"To create is my passion," says Alain, words that sit at the top of his company website (inthepockets.com) that details his long career. Alain is a well-known figure in his native France and worked for most of the major French companies. Starting out with a programmable calculator, Alain shifted his focus onto 8-bit machines – getting his work published as type-in listings for French magazines *Tilt* and *Sprites*. The 16-bit years saw him move in to 3D with a trilogy of games for Titus before programming for Japanese consoles, including the FM Towns and PC-Engine. Localising games for the French market was Alain's task for a few years. He has also programmed for the N-Gage and more recently tackled iOS development.

What were your earliest experiences with computers back in the day?
Before I started programming, I started to play videogames in 1977, and I was thinking, 'It's incredible! Programmers are paid to do this!' And this idea helped me to become a game programmer. My first programming experience was in September 1980, with the TI-57. [A Texas Instruments calculator that was programmable, but switch it off and the program was lost.] But I was already a computer fan, I read a lot of magazines like *Micro System*, and I had some electronics knowledge. Three years before I started programming, I spent my free time reading electronics magazines and building some electronic circuits. But that meeting with the TI-57 changed everything for me. When you write the software you don't spend money, if you have bugs, you fix it and your work is saleable… you just need time.

How did you send your programs to the magazines to become type-in listings?
Before 1983, I wrote many small games. I thought, 'Maybe if I send my listings, maybe I can earn some money to buy a new computer?' During 1981 and 1982, I was sending a lot of listings of my games to many computer magazines.

How quickly did you learn machine code?
Quickly, but remember, every computer was different. You need to learn each processor: Z80, 6502, 8086, 68000. And you have to learn the hardware of each computer, but it's not enough. In order to create a game you need to understand how the game works, and it's different for each style of game. A 2D platform game, it's different than 3D race cars. Each type of game needs different programming knowledge.



» [Marta Alice] An early *Q*Bert* clone, this is *Al*Berthe* on the Matra Alice.

***Al*Berthe* and *Fringale* were clones of arcade games – did you play in the arcades a lot?**
I started playing in 1977 and I played a lot since 1979 and I still play now. But before 1983, I played mainly at the arcade. I am still playing on my Xbox. I have a lot of games, but I am still a big fan of the *Grand Theft Auto* series, the *Gears Of War* games and *BioShock*. Funny fact, it's easy now to finish almost any game. It's ten times easier now to finish *Gears Of War* than *Mario 64*. Many gamers are totally impressed by the difficulty of those old games. Especially a SNES game like *Nightmare Buster*. But at the time, it was not so hard.

You converted *Coq'in* (aka *Chickin' Chase*) to Thomson computers – do you remember this crazy game and its developer Jawx?
I remember the Commodore 64 version, but I never actually met Jawx's people. I was hired by Titus Software to port games from one computer to

> I played a lot since 1979 and I still play now. But before 1983, I played mainly at the arcade
>
> Alain Fernandes

another computer. I never met the original designer of the game.

What were your favourite 8-bit computers?
Before 1980, the Commodore PET 2001. I love the all-in-one concept. Also, the Amstrad CPC 664 and the MSX. I love the Sanyo PHC 28 with [its] two cartridge slots and its keyboard. Finally, the Commodore 64. It was too expensive for me in 1983, but the hardware was amazing.

Why was the Oric so popular in France?
I chose the Oric-1 instead of the ZX Spectrum because there was seven weeks waiting time for the Sinclair. Maybe that was a reason for the Oric's success in France. The Oric-1 distribution was better in France. I remember when I stopped at the computer shop, I don't find any ZX Spectrums because it was only sold by mail. Maybe for many new users, the keyboard of the ZX Spectrum was very strange.

What made the Thomson machines special?
The MO5 and TO7 are nothing special, but there were more than 100,000 in the schools in France, so people bought the Thomson for their home. In 1983/84, the French government decided: 'Every school must have a computer room. Each student must learn to use a computer and learn with educational software.' Many software companies like Cedic and Nathan made a lot of educational software for the Thomson MO5 and TO7. But other manufacturers, like Matra and Phillips have asked, 'Why only Thomson MO5/TO7?' So the French government also bought a lot of Matra, Phillips and other computers. The problem is, they were not compatible with the Thomson. Cedic and Nathan needed to reprogram all the educational software on the other systems! That's why Titus Software at the beginning worked with Cedic and Nathan. There is a lot of educational software to reprogram. I also did some educational software on the VG5000 and the Excelvision in 1985 and 1986.

How did you get the job converting Activision's early computer-themed title *Hacker*?
Hacker on the Thomson MO5 and TO7 was published by Loriciel in France. In 1986, Loriciel asked Titus to convert *Hacker*. I worked for Titus from the beginning of 1985 to the end of 1990, and I made a lot of conversions during that period and *Hacker* was one of them. Remember, before the success of *Crazy Cars*, Titus made a lot of games [under contract] for other game companies.

Who was behind the idea for the puzzle game *Titan*?
The original version of *Titan* was on the Amstrad CPC. The author/programmer was Phillipe Pamart – a very great programmer! Titan Amstrad CPC was the perfect example of "you need to learn the hardware to create a game". The perfect knowledge of the Z80 was not enough to create a game.

VIVE LA FRANCE!

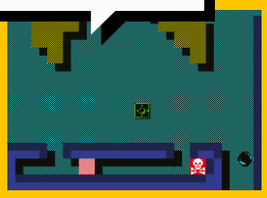
A slice of french videogames history

The French software industry has seen huge growth over the years, but also many companies struggling. Infogrames, founded by Bruno Bonnell in 1983, was first to aim for international renown with games translated into English or distributed under a licensing deal. Role-playing game *Mandragore*, detective title *Vera Cruz* and *Hostages* blazed a trail, with the armadillo mascot becoming familiar. Ubisoft (founded in 1986 by the Guillemot brothers) followed suit, bringing games such as *Twin World* and *Pro Tennis Tour* (aka *Great Courts*) to a wider audience. Its early adverts included references to K7 – ka-sept, or cassette. Loriciels became a bigger player during the Nineties before hitting financial troubles. Delphine, most famous for *Another World* and *Flashback*, lasted from 1989 until 2004. Titus also grew big and then failed. Started by brothers Eric and Hervé Caen in 1985, it took over Palace Software and Interplay before closing its doors in 2005. Having acquired British software houses Ocean and Gremlin, Infogrames would ultimately buy the remaining assets of Atari Inc. After Bonnell left, Infogrames rebranded as Atari SA but went into bankruptcy in 2013 – leaving Ubisoft as the last major French games company still standing.

» Alain is a big fan of the Oric-1 home computer.

CINQUE CLASSIQUES

The games from Alain you should check out



TITAN (ZX SPECTRUM)
■ This is a game Alain has returned to many times in his career, and the ZX Spectrum version still holds up today. Ignore the daft story about a mad professor, enjoy the 80 smooth-scrolling levels as you try to break down all the bricks in this clever variant on *Breakout*.

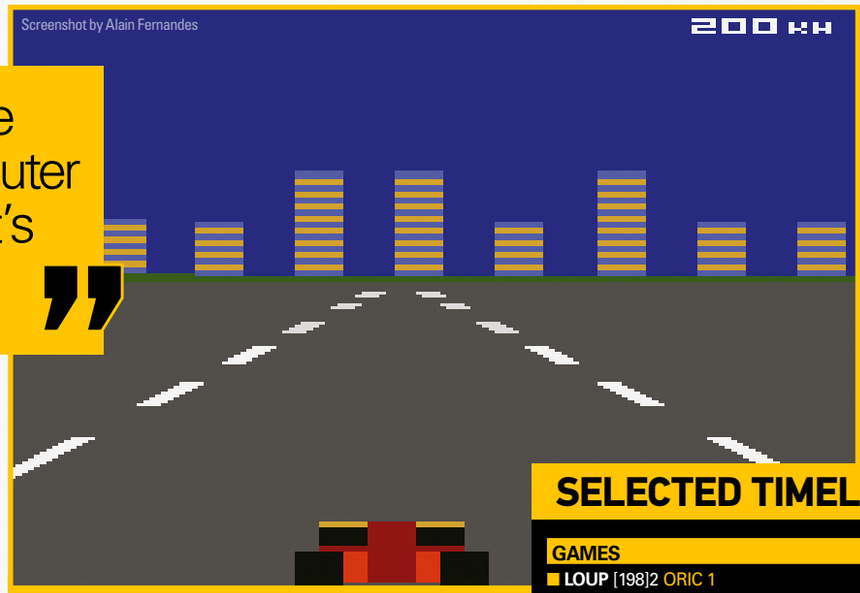
GALACTIC CONQUEROR (AMIGA)
■ The best-received of Alain's trilogy of 3D titles, with influences from *Galaxy Force*. Stop the enemy forces attacking the Carillon station by clearing sectors, recharging energy with the help of the mothership. The 3D works well and the game is nicely presented.

KNIGHT FORCE (AMSTRAD CPC)
■ Travelling through five time periods, the heroic knight must collect seven talismans to help him defeat an evil wizard. Hack-and-slash action with detailed graphics, this will take time to learn and conquer. The Amstrad port was nicely done by Alain himself.

CUB(HIC)! DELUXE (WINDOWS)
■ One of a series of compelling puzzle games Alain created, the aim is to clear the screen by clicking on groups of the same-coloured cubes without leaving any behind. It's available on multiple portable and mobile formats, including Nokia's N-Gage.

1000 BORNES (DS)
■ The classic French card game works well on touchscreen. Watch out for hazards played by your opponent, including speed limits and a flat tyre. Presentation is slick and the game is easy to learn. Special Mode adds DS features, such as blowing into the mic to inflate a tyre.

> I'm more of a console lover. For me a computer is for programming, it's for my job
> Alain Fernandes



» [Atari 2600] The only known image of *Crazy Cars* on the Atari 2600.

You have programmed multiple versions of *Titan*, which is your favourite?
Titan was the biggest success for Titus. *Titan* was made for a lot of systems. Amstrad CPC, ZX Spectrum, Commodore 64, Amiga, Atari ST, PC DOS, NES, NEC PC-Engine, FM Towns, Apple Macintosh and Phillips CDI. I made the FM-Towns version and the ZX Spectrum version in 1989, and 22 years later I made the iOS version. Anuman bought the rights to that version and made a 3D remake. My favourite is still the FM-Towns version. I flew to Los Angeles and I stayed there for six months in 1989. It was so amazing. I also like the iOS version because I reprogrammed it from scratch. It's written in C/OpenGL and I made it in just 79 hours. That's fast, believe me. I also designed the 80 levels, 75 are different from the original version.

What did you prefer, the Amiga or the Atari ST?
I prefer the FM-Towns. Remember the 'war' between the Atari ST and the Amiga was a war between users. In the early Eighties, when you work for a videogames company, you don't choose your computer. If you say, 'No, I work only on Atari ST,' you don't last, you will be fired and you will be replaced by another programmer with more skill. I'm more a console lover, than computer lover. For me, a computer is for programming, it's for my job. I don't spend my free time on computers or with a smartphone. I prefer using my free time to play on my Xbox or watching movies.

Did you develop a 3D engine for the Titus Software titles *Crazy Cars, Galactic Conqueror* and *Fire & Forget*?
There was no 'engine' because the hardware was different for each computer. Back in the Eighties, the knowledge of machine code was a small part of developing a game. The knowledge of the hardware was also very important. *Crazy Cars* on the Thomson MO5 has nothing to do with the Amstrad CPC version. Galactic Conqueror for Amiga has nothing to do with *Crazy Cars* on DOS, and so on.

» [Atari ST] Can you rescue the captive Princess and defeat the evil wizard in *Knight Force*?

Whose idea was the *Classique* compilation of old arcade games for Atari ST?
Before the Atari ST version, there were four other volumes (12 games) created on Thomson MO5 and TO7. They sold very well. So Titus did a test with *Volume 1* on Atari ST. But the sales were too low, so no other volumes were made for Atari ST.

***Knight Force* was all your own work, what inspired the game?**
I think, maybe Elric the sorcerer (from the Michael Moorcock novels), Kurgan from *Highlander* and all time travel movies.

How easy was it to port *Knight Force* back to the 8-bit Amstrad CPC, and did you have to change much when converting it?
No so much, that is why the Amstrad version of the game was on two disks.

What was the development kit for the FM-Towns system like?
In June 1989, Fujitsu asked Titus to send a programmer (me) to Los Angeles, where Titus also had offices, to work on *Titan* for the FM-Towns. The kit was a 386 PC, with C/ASM cross compiler for the FM-Towns. You compile on the PC and you transfer the executable to the FM-Towns. It was my first programmer project published on CD-ROM in Japan.

How long did it take you to convert *Jim Power* to the PC-Engine?
I only had three months to rewrite the game from scratch. It was a very short project. And I had no previous experience working on the PC-Engine.

SELECTED TIMELINE

GAMES

- **LOUP** [198]2 ORIC 1
- **LE DIAMANT DE KHEOPS** [1984] ORIC 1
- **DES SIGNES DANS L'ESPACE** [1985] MSX
- **FRINGALE** [1985] MATRA ALICE
- **AL*BERTHE** [1985] MATRA ALICE
- **COQ'IN AKA CHICKIN' CHASE** [1985] THOMSON MO5, TO7
- **HACKER** [1986] THOMSON MO5, TO7
- **MADDOG** [1986] THOMSON MO5, TO7
- **BALTHAZAR** [1986] THOMSON MO5, TO7
- **MEURTRE SUR L'ATLANTIQUE** [1987] C64
- **CLASSIQUE VOL 1** [1987] ATARI ST
- **CRAZY CARS** [1987] ATARI ST
- **FIRE AND FORGET** [1988] AMIGA, ATARI ST
- **GALACTIC CONQUEROR** [1988] AMIGA, ATARI ST
- **KNIGHT FORCE** [1988-89] AMIGA, ATARI ST, AMSTRAD CPC
- **TITAN** [1989] ZX SPECTRUM, FM TOWNS
- **CRAZY CARS** [1990] ATARI 2600 UNRELEASED
- **DARK CENTURY** [1990 SHARP X68000
- **ANTHEUS** [1990] DOS, AMIGA, ATARI ST
- **LIGHT QUEST** [1991] PC, NEC PC9801, AMIGA, ATARI ST
- **PSYBORG FOR LORICIEL** [1992] PC
- **JIM POWER** [1992] PC-ENGINE
- **WATERWORLD** [1995] GAME BOY
- **RONALDO V-FOOTBALL** [1996] PS1
- **RAZMOKETS DÉTECTIVES** [1999] PC, MAC
- **GÉNYMATIK L'ENCEPHALOJO** [2000] PC, MAC
- **READER RABBIT** [2002] PC, MAC
- **ENGIE BENJY** [2005] PC, MAC
- **LOG(HIC!), CUB(HIC!) & CUB(HIC!) BABY** [1999-2008] MOBILE
- **IF3 RACING** [2005] NOKIA N-GAGE
- **1000 BORNES** [2008] DS
- **FORGOTTEN GHOST** [2010] IOS
- **WHITE MONKEY** [2011] IOS
- **TITAN** [2011] IOS
- **ALIENS ABDUCTION** [2012] IOS
- **THE SECRET MINER'S ADVENTURE** [2013] IOS
- **SUPER BOARD ZOMBIE-NINJA** [2013] IOS
- **BLOCKST** [2016] WINDOWS, OSX, LINUX
- **THE RETRO CITY** [2017] PC, MAC, LINUX

» [PC Engine] The PC Engine port of *Jim Power* was his most gruelling deadline – he only had three months to pull it off.

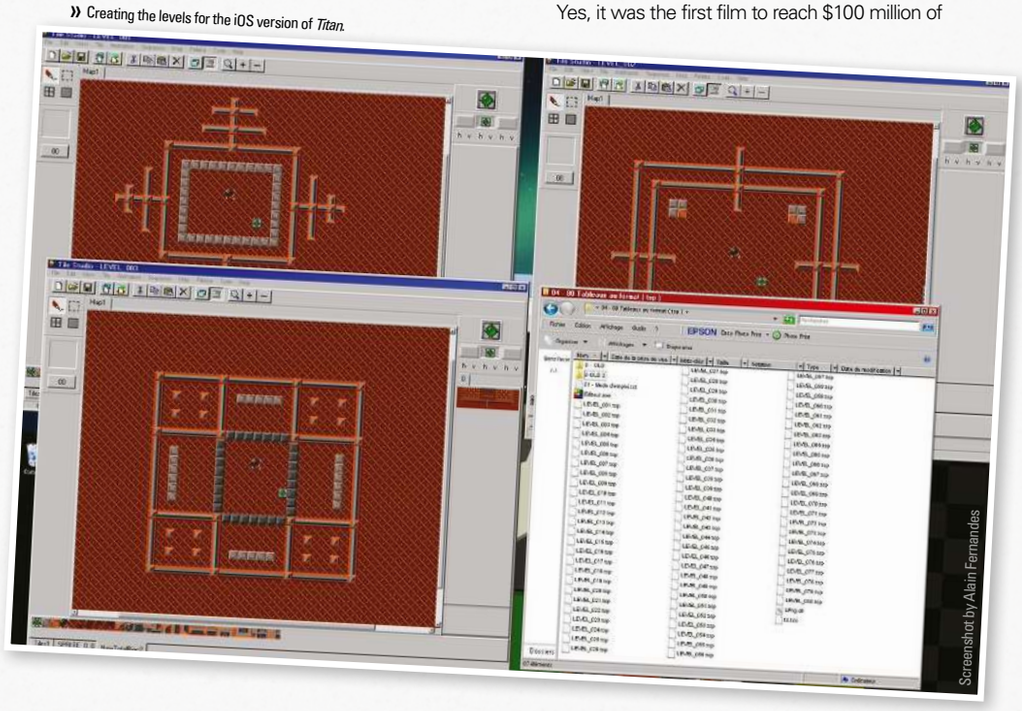
LES ORDINATEURS

The obscure systems Alain has worked with

The list of hardware Alain has worked on includes interesting and obscure machines. The Matra & Hachette Ordinateur Alice, a collaboration between two French companies, was a clone of the Tandy/Radio Shack TRS-80 MC-10 but stood out because of its distinctive red shell and white keyboard. Like many French machines, it sported an AZERTY keyboard, rather than the more familiar QWERTY layout. It came with a Péritel (SCART) connector instead of an RF modulator. Launched in 1983, the following year saw the upgraded Alice32 (with 8KB of Video RAM and a built-in assembler) and in 1985 the Alice 90 (with the ability to mix computer graphics and video). It became part of the government's Informatique Pour Tous (IT For Everyone) programme.

Thomson was a rival French electronics company that based its machines around the Motorola 6809 processor. The T07 loaded its Basic from cartridge, reducing the memory available. It also had a built-in lightpen. The enhanced MO5 was meant to compete with the Commodore 64 and ZX Spectrum and the device found its way into many schools. It had 48KB and built-in Microsoft Basic. Later models in the T and M ranges failed to sell well outside their native home of France.

» Creating the levels for the iOS version of *Titan*.

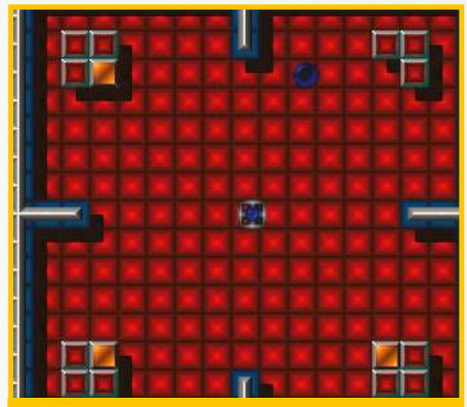


Remember, [the conversion is] not based on the Amiga version code.

You worked with most of the major French companies, which was the best?
Either Titus: for six years, I worked on many different machines, different hardware, and different processors. I made so many games. I learnt a lot. Or Mindscape: during almost seven years, I used my knowledge to solve hundreds of bugs and technical problems, and the salary was great.

Do you remember the hype around Kevin Costner's *Waterworld* film, and working on the Game Boy tie-in?
Yes, it was the first film to reach $100 million of budget I think. At the time, I worked for Ocean France/PAM (Power And Magic Development) – a new game studio. And the first project was *Waterworld* for Nintendo's Game Boy. Fortunately, the movie was delayed and that gave us more time to finish the Game Boy version.

You localised several PC/Mac games for the French market, does this take different skills?
It was not only for the French market, it was also for many European countries. *Reader Rabbit* and *Adi* have been great successes around the world. You need to understand each *Reader Rabbit* grade was made by different studios, with different tools and computer languages. Worse, at the end of the Nineties many game studios created their own computer language, their own compiler, and their own file formats. To be sure, when you need any modification, you have no choice but to use your skills. For example, during the localization of *Reader Rabbit* in 2002, I received 64 CD-ROMs full of data and source code. But this is not



» [FM Towns] Alain moved to Los Angeles for six months to work on the FM Towns version of *Titan*.

> Everything is possible. Everything has changed since Pong and it never stops
> Alain Fernandes

» [Game Boy] Alain programmed the isometric sections of *Waterworld*, based on the infamous Kevin Costner film.

the final source code. So you need a lot of experience to improve the code and rebuild every project.

Have you got a favourite handheld console?
I still love the Game Boy Advance SP! Great battery, good size, the backlight and compatible with the Game Boy and Game Boy Color, and of course the GBA games. Manufacturers should make better batteries. Many handheld systems have too limited battery life, especially when you play a 3D game. The Game Boy, the GBC, the GBA, the Nintendo DS all have a power off switch. When you turn off your old Nintendo for one or two weeks, no matter, they don't need to be recharged. Just turn on and that's it. With modern systems, you need to recharge two or three times each week.

How easy was it to develop for the Nokia N-Gage mobile phone?
You have two possibilities for N-Gage development. The first is the Symbian 6.0 SDK, C++ and OpenGL ES – great if you need to develop a 3D game. The second is the J2ME MIDP 2.0 SDK, 'Java Micro Edition'. The J2ME is easier then the Symbian SDK. I made some commercial games on N-Gage for In-Fusio. I love *Zaps*. At the time the N-Gage was the best mobile phone to have for gamers.

How did you come up with the puzzle game *Cub(Hic!)* and its sequels?
In 1997, Flash, Java and HTML/JavaScript gave me a new way to develop games. I decided to develop a small game, just for fun. *Log(Hic!), Cub(Hic!)* and *Cub(Hic!) Baby* became my 'Hello World' program. Each time I had access to a new SDK, I wrote a new version. I made maybe a hundred versions of these three games. In 2001, *Log(Hic!)* was a great success on the Windows Smartphone.

Do you like working with touchscreens?
Depending on the type of game. For example *Titan* iOS is very great with the touchscreen control. I made another iOS *Breakout* game, and it is better with the touch control. Just slide the racket, it's simpler. You need to rethink old games and change the concept to adapt to the touchscreen. But sometimes, I need physical buttons.

How quickly did you learn iOS development?
Very fast, of course my XCode / OSX programming experience since 2002 helped me a lot. But all my iOS commercial games made between 2008 and 2013 were written in C and OpenGL. *Titan* iOS was written in C/OpenGL in 79 hours, and the source code was very portable. After that, it took me only two hours to do the HTML5/JavaScript version.

Is modern development and porting between systems much easier than working with older, classic hardware?
Since 2008, Unity3D is the main tool to create and develop games. Now 80-90 per cent of gaming companies hire Unity3D programmers. When you make a game with Unity3D, it is 100 times easier than to make the same game in C/OpenGL, and is 100,000 times easier than building the same game in assembly language. But now, 99 per cent of the new games made with Unity3D are just copy and paste.

Do you have any funny stories from your years in the industry?
When I was working on Titan for the FM-Towns in Los Angeles, the graphic designer stayed in France. All the graphics were sent over to me using a Commodore 64 and a modem.

What was your worst deadline to meet?
The *Jim Power* adaptation from the Amiga to PC-Engine was the worst, just three months

Did you have many cancelled or unfinished games, and do you still have anything left over from them?
I have kept a lot of things from my unfinished projects, I hope someday, when I have enough time, to rebuild some of them.

So, with that in mind, would you like to revive more of your old games?
Yes, I think so. For example *Antheus* (made for DOS, in 16 colours), it is not finished, but with DOSBox it works great. But time is the key. Sometimes a seemingly-simple thing takes you a lot of work. You need to make a good, professional choice – do you develop your own game with your own money and time, or do you work for a company?

You're a developer with a lot of experience in the industry, what do you think will happen in gaming's future?
Everything is possible. Everything has changed since *Pong* and it never stops. But you need to follow the technology, and learn new stuff each year. ✱

YOU ASK THE QUESTIONS

Alain answers your burning questions

NORTHWAY: Did France have any good computers that utilised the 6809 CPU?

I love the Thomson MO5 and the TO9. I also love the Dragon 32/64 and the Vectrex, but they are not French. I do not know why Thomson chose the 6809. When the Amstrad CPC was released in 1984, everything changed.

MAYHEM: There are a lot of 'minor' formats in your early roster – why those formats, and not say Atari 400/800 or Commodore 64?

I never chose my computers, only the Oric 1. I work for many companies and they decide for me. When you are hired by a company, they need a programmer with the capability to adapt quickly.

THE LAIRD: In your timeline is *Crazy Cars* for Atari 2600. Was this a port that was never released?

Crazy Cars for the 2600 was an order from a hardware distributor. It was cancelled because it was difficult to create a car that looks like a Mercedes, Porsche, or Ferrari on the 2600. And also the cost was much higher than any other media (K7, floppy).

DRS: Your early games have French titles but the later ones have English titles. Did you feel that you had to adopt English for your work to find a broader audience?

I started with the French company Tilt and the game was on sale only in France! Of course, when my games were distributed or sold internationally market, the title was in English.

Fighter's History: Mizoguchi Kiki Ippatsu!

MORE THAN A FOOTNOTE

» SNES » 1995 » DATA EAST

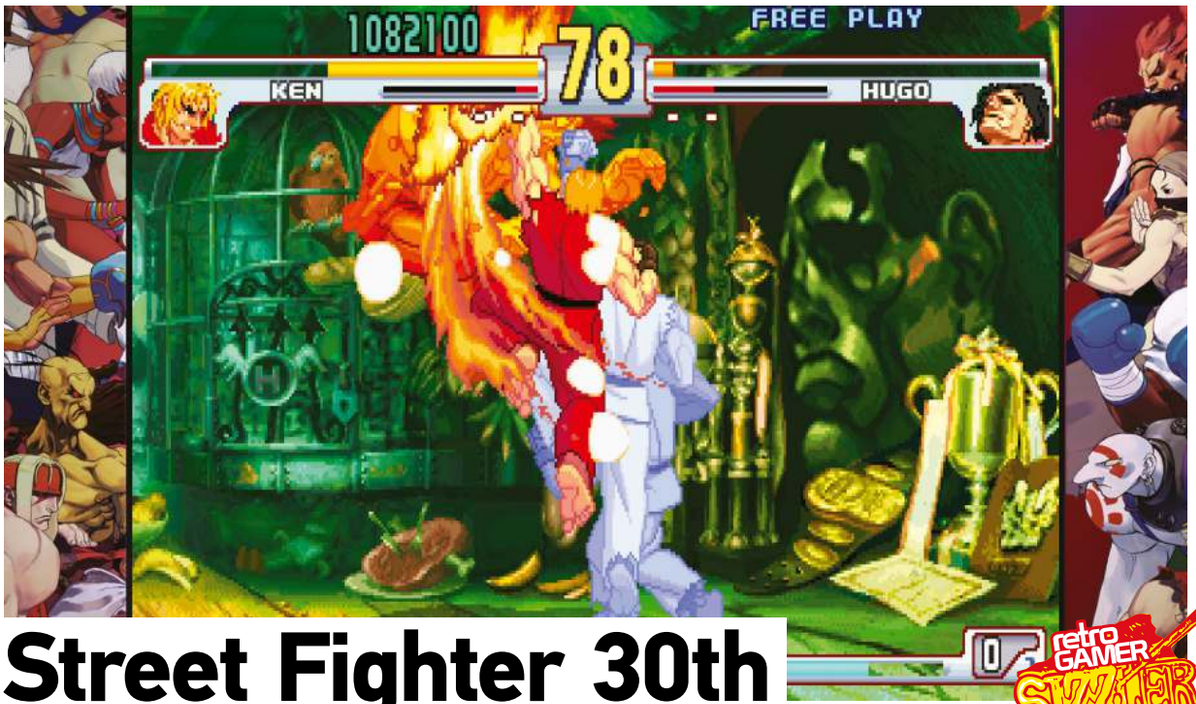
A little while back, I bought the *Data East Classic Collection* for my SNES. Having been a Sega fanatic while growing up, my Nintendo collections have always felt tiny by comparison, and I knew I'd get my money's worth from the *Magical Drop* games and the occasional hilarious multiplayer game of *Super Side Pocket*. The *Fighter's History* games didn't really factor into my purchase decision at all.

Of course, not buying the cartridge for the *Fighter's History* games doesn't mean I haven't played them. Are they top-tier fighting games? Not at all – they're hard and extremely unfriendly to newcomers, plus they're a little bit stiff and the move inputs can be odd. But they're very competently constructed and they're quite enjoyable if you're bloody-minded enough to persevere in single-player. Of course, I was definitely determined enough to see this sequel through to the end – if I can beat *Shadow The Hedgehog* 11 times, doing this once is no sweat. I like character designs like the judoka schoolgirl Ryoko and of course Karnov. Plus, the games give a less familiar alternative option for multiplayer gatherings, which is vital given that the other SNES fighting games I own are *Mortal Kombat* and *Street Fighter II*.

I'd never have bought *Fighter's History: Mizoguchi Kiki Ippatsu* on its own, but I'm pleased to have played it. That's why I love compilations – even now, they frequently introduce me to fun games I would otherwise have missed entirely. *

PUSH START
MIZOGUCHI

>> This month, Nick plays countless versions of Street Fighter and goes for a spin in Slipstream, while Darran discovers if Ikaruga still has what it takes on the Nintendo Switch



Street Fighter 30th Anniversary Collection

retro GAMER SWINDLER

FIGHT FOREVER

INFORMATION

- **FEATURED SYSTEM:** PS4
- **ALSO ON:** XBOX ONE, SWITCH, PC
- **RELEASED:** OUT NOW
- **PRICE:** £34.99
- **PUBLISHER:** CAPCOM
- **DEVELOPER:** DIGITAL ECLIPSE
- **PLAYERS:** 1-2 (1-2 ONLINE)

» [PS4] You'll get tempted to play *Street Fighter*, but we'd be surprised if you return for a second go.

When the biggest inaccuracy in a collection of emulated games is the title, you know it's a pretty good product. Yes, 2018 is actually the 31st anniversary of the *Street Fighter* series – but we're hardly going to moan a great deal over that given what's on offer in this compilation. 12 arcade *Street Fighter* games from the Nineties are represented here, with four including online multiplayer, and there's a substantial amount of 'Museum' content, too.

As you likely already know, the quality of the games included here is very high. The original *Street Fighter* is included for the sake of completeness, but is unlikely to be of any long-term interest due to its stiff, antiquated fighting action. But *Street Fighter II* and its four updates revolutionised the genre and play as well as they ever did, the anime-inspired *Street Fighter Alpha* trilogy combines advanced mechanics with fan favourite characters, and the exquisitely animated *Street Fighter III* series is still highly regarded by competitive players. There's obviously some redundancy here, as we'd wager most people aren't going to bust out all five versions of *Street Fighter II* regularly, but we would still expect players to rotate between five or six of the games.

Emulation is spot-on throughout the collection, and options such as difficulty, game speed and damage level can be set for each game individually. Excellently, button configuration is universal – no pointless duplication here, since all the games utilise the same control system – and a handy list of special moves can be accessed during gameplay. There are also TV and arcade screen filters, three levels of picture zoom, and optional screen borders.

As far as multiplayer goes, only four games support online play: *Street Fighter II Turbo*, *Super Street Fighter II*

BRIEF HISTORY

» Effectively one of the pillars that built gaming as we know it, the *Street Fighter* series has been a constant throughout the decades since it's first release in 1987. *Street Fighter II* set the template for one-on-one fighters in 1991, and the series has seen regular play at gaming tournaments since.

✱ PICKS OF THE MONTH

DARRAN

Ikaruga

Another fantastic shooter for the Switch and another reason for getting rid of my DC shooters.

DREW

Bloodstained: Curse Of The Moon

This was a nice little surprise, as a backer I'm glad to know my money is being well used!

NICK

Street Fighter 30th Anniversary Collection

It's been nice to remember just how busted custom combos were in *Alpha 2*

» [PS4] There are plenty of screen options on offer – this shot uses original scaling and the TV filter.

» [PS4] The Museum mode is a great inclusion for anyone interested in *Street Fighter* history.

Turbo, *Street Fighter Alpha 3* and *Street Fighter III: Third Strike*. The restriction is a little annoying but serves to stop people dispersing across so many different games. Online play is good when it works, but unfortunately somewhat barebones – there's no current option to filter matches (for example, by region or connection quality), no way to create tournaments and there are few options when creating casual lobbies (no character bans or ISM restrictions here). When you do encounter a bad connection, the game will stutter as the connection tries to keep up, music and all. If you don't want to deal with that or want to play one of the other eight games, you'll have to face your opponents as you did back in the Nineties – shoulder to shoulder in front of the same TV. This works perfectly, as you'd expect.

The Museum mode is a real treat. As well as a fairly comprehensive overview of the series' history as a whole, there are deeper dives on individual games. Bizarrely, while home versions are often mentioned, their platforms aren't, so expect to see '16-bit home cartridge' as a euphemism for 'SNES' more than once. There's plenty of supporting visual material, too, with previously unseen prototype images and design documents to feast your eyes upon. Additional information is available on characters and there's a sound test mode here, too, allowing you to listen to the excellent soundtrack of each game on the compilation.

We do have some small quibbles with the compilation, though. Firstly, it seems absurd that Training mode is only available for the four games which also support online play. Secondly, the Museum mode references a number of games which would have made for bonus inclusions – *Final Fight* is noted for its origin as "*Street Fighter '89*" and the likes of *Super Puzzle Fighter II Turbo* and *Pocket Fighter* are mentioned as notable spin-offs. Given that this compilation already emulates the arcade boards those games ran on, they would have been nice to see. Lastly, there's no option to map spare controller buttons to combinations like all punches or light punch and light kick, which would have been nice.

Additionally, fans of the *Street Fighter Alpha* games may wish to stick with their existing versions. The absence of *Street Fighter Alpha 2 Gold* is a minor one, but *Street Fighter Alpha 3* gained a lot of content after its initial arcade release – home versions contained between six and ten additional fighters, and some of these were ported back to the arcade in *Street Fighter Alpha 3 Upper*. Both of these updates were previously included in the PS2 compilation *Street Fighter Alpha Anthology*, and it's a shame not to see them here. Likewise, we're curious as to why *Hyper Street Fighter II* was omitted.

WHY NOT TRY

▼ SOMETHING OLD
STREET FIGHTER ALPHA ANTHOLOGY (PS2)

▼ SOMETHING NEW
STREET FIGHTER V (PS4)

Despite some minor drawbacks, this collection deserves a place in your library if you have any interest in *Street Fighter* or fighting games in general. Whether you're a one-player warrior with a love for the character backstories, an *Alpha 3* maniac who has been waiting for a new online version since the Dreamcast, or just someone who wants to see why the hardcore love *Third Strike* so much, this will suit your needs. ✱

In a nutshell

Some minor omissions mean that this doesn't quite render past *Street Fighter* collections obsolete, but for most people it'll serve as a perfect reintroduction to some of the best fighting games ever made.

>> Score **91%**

» [PS4] The many versions of each game are included, so you can revisit your favourites.

★ PICK OF THE MONTH

Bloodstained: Curse Of The Moon

» **System:** PS4 (tested), Switch, Xbox One, 3DS, Vita, PC » **Buy it from:** Online » **Buy it for:** £8.99

This is the prequel to *Bloodstained: Ritual Of The Night*, a forthcoming spiritual successor to the *Castlevania* series which broke Kickstarter records back in 2015. However, rather than the *Symphony Of The Night* model that the future game will follow, *Curse Of The Moon* takes inspiration from the earlier *Castlevania* games, with a NES-themed aesthetic and linear stage progression.

The plot of the game follows the exorcist Zangetsu on his quest to rid the world of demons and alchemists. However, after defeating bosses, this swordfighter is joined by three other characters with their own unique abilities, including a slide that gets through narrow spaces and a bat transformation with which to cross chasms. You can switch between these characters on the fly, and each has their own life bar – but if one dies, you'll restart at an earlier point without that character. Losing all of your characters causes a life loss and sets you back further.

You'll ideally want to keep your characters alive though, as all of the upgrade items are found in special routes that require a specific character's skills to access, and the longer standard routes offer no benefit. What's more, certain characters are much more efficient in specific boss fights. These encounters are a real highlight of the game, with clever themes and interesting attack patterns.

Some of the more frustrating classic *Castlevania* elements have been removed – we weren't killed nearly so often by being knocked back mid-air, and that's only a problem in Veteran style as Casual removes that and grants infinite lives. In fact, some might argue that the difficulty reduction goes too far. Despite featuring eight substantial stages, we got through our first play over a weekend of light play without hitting the Game Over screen. Still, there's an unlockable Nightmare difficulty for the masochists and multiple endings to hunt for too.

Inti Creates has delivered more than a prologue – this is a homage that understands its inspirations well while delivering a neat little twist, and is worthy of its standalone release.

>> Score **83%**

» [PS4] Miriam has a slide attack which is useful in getting to hard-to-reach areas.

» [PS4] The Alchemist doesn't have a hefty life bar, but his magic makes up for it.

Slipstream

» **System:** PC (tested), Mac, Linux
» **Buy it from:** Online » **Buy it for:** £7.19

This racer owes a debt to the arcade racers of the Eighties and early Nineties, particularly the *OutRun* series. As you race through themed stages, forking off to new ones at each checkpoint, you're likely to get a strong sense of déjà vu. In fact, it's fair to say that *Slipstream*'s drifting mechanics make it feel a lot like *OutRun 2* with the graphical appearance of *OutRunners* – and while the drift handling isn't quite as smooth as that description implies, it comes quite close.

The Eighties-style synth-driven soundtrack is something a bit different, though, and the game offers various humorous rivals. It features a variety of cars, a grand prix mode with upgrades and more to add depth. If you're after a good retro race, this will do the job admirably.

>> Score **80%**

Shaq Fu: A Legend Reborn

» **System:** Switch (tested), PS4, Xbox One, PC
» **Buy it from:** Online, retail
» **Buy it for:** £14.99 (PC) to £34.99 (Switch)

The good news is that *Shaq Fu: A Legend Reborn* is a superior game to the 1994 original *Shaq Fu*. The bad news is that's a pathetically low bar to clear and Big Deez Productions game, only just about manages it. While the move to making it a fully fledged scrolling brawler is a wise one, it's let down by dull fighting mechanics, some annoying chokepoints, unsatisfying boss encounters and a complete lack of co-operative play. There are some nice touches to be found, including a *Turtles In Time* homage and the odd bit of breaking the fourth wall, but overall this is a distinctly average game, with the (physical) Switch version being shamefully overpriced for what it actually offers.

>> Score **50%**

Ikaruga

» **System:** Switch » **Buy it from:** Online
» **Buy it for:** £13.49

Treasure's superb polarity-based shooter has rocketed its way onto Nintendo's Switch, instantly becoming one of the best shoot-'em-ups on the system in the process. As with many Switch vertical shooters there's the option to rotate the screen vertically, but you'll still need to detach the Joy-Cons to play (which continues to frustrate us). New additions include the ability to control both ships at once with two separate Joy-Cons, as well as a brand-new 'Prototype' mode, which not only lets you change the rate that enemies fire back at you, but also throws limited ammo into the mix as well. The end result is arguably the definitive version of Treasure's game at a fantastic price point. To miss it is to miss out.

>> Score **92%**

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Gamers HOMEBREW

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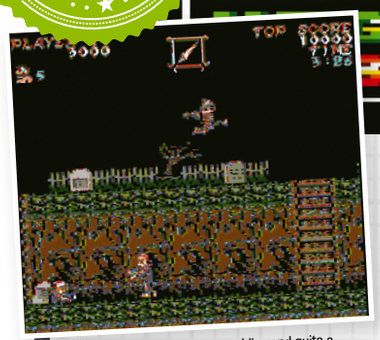
» [Amstrad CPC] Robbie strikes back at the creepy crawlies threatening his garden.

Gaming NEWS



» [Amstrad GX4000] Ghosts, goblins and quite a few zombies as well in *Ghosts 'N Goblins*.

» [Amstrad CPC] This bat doesn't look particularly happy in *Shadows Of Sergoth*.

AMSTRAD ACTION

There's been quite a bit of activity in the Amstrad CPC world in recent months so, along with the review of *Galactic Tomb* over the page, we've got a few new releases and an update to look at. The first is a conversion of Ultimate's *Pssst* from the ZX Spectrum which is called *Robbie Strikes Back*. The titular gardening robot must use bug spray to defend his prized Thyrgodian Megga Chrisanthodil from the advances of highly destructive insects. Of course, this task is more complicated than it might sound since there are multiple types of spray available with each targeting a specific enemy and merely stunning the others. Raid the garden shed at Kikstart.eu/robbie-strikes-cpc for more information.

Next is another conversion, this time a major reworking of *Ghosts 'N Goblins* which targets the Amstrad GX4000 so therefore works on the Plus range of computers as well. The original Amstrad conversion by Elite wasn't a particularly good one in the eyes of CPC owners, so developer Xifos set out to build a new conversion which would take advantage of the enhanced Plus hardware. The result is impressive, too, with high-quality graphics based on the coin-op version and an excellent rendition of the soundtrack as well. Kikstart.eu/ghosts-goblins-gx4000 heads to CPC Wiki's forum for the launch thread and that all-important cartridge image download.

Back to the regular Amstrad CPC, but this time with 128K, we've got *Shadows Of Sergoth* which is a *Dungeon Master*-style dungeon crawler, set in the fantasy medieval realm of Chrisandia. The format of this adventure is based on the tabletop game *Microlite20* – itself a pared-down, lightweight version of *Advanced Dungeon & Dragons* – so all of the combat is based on a series of primary and secondary statistics for each character. Explore the catacombs behind Kikstart.eu/sergoth-cpc while paying attention to how detailed the surroundings are, and be sure to read the very detailed user manual before setting out on your initial foray.

And to finish off this month's Amstrad-flavoured roundup we've recently been informed of an upgrade to Keith Sear's trigger happy scrolling shoot-'em-up *Chibi Akumas Episode 1* – rebuilt in the sequel's engine and referred to as version 1.666 - along with news of a physical release on disc and a plethora of ongoing conversions to other Z80-based platforms such as the MSX and Spectrum in the works. Follow the link Kikstart.eu/chibi-update-cpc for the discussion thread with more information and the relevant links.

NEW GAMES NEEDED

If you have a homebrew project you would like to see featured then please contact us at: **retrogamer@futurenet.com**

HOMEBREW HEROES

We sat down for a chat with Chester Kollschen – the coder behind platformer Sam's Journey for the C64 – about what went into developing this impressive game and the sheer scale involved

» [C64] Spaceman Sam, seen here full of the joys of spring.

THE BIG INTERVIEW Chester Kollschen

Where did the idea for *Sam's Journey* come from?
My team and I, we've always been great fans of platform games on videogame consoles, such as *Super Mario Bros 3*, *Kirby's Adventure*, or the *Donkey Kong Country* series. On the C64, however, games like these were very rare. At the end of the Nineties, I first thought of making a C64 platformer and even drafted a character sprite. But the project remained in the idea state until we picked up on it in 2015. When we were brainstorming features, I dug out my old character sprite and we developed it further to become the Sam we know today.

And roughly how long did it take to develop and who was involved?
As it was an on-off project, it's not easy to say exactly, but we can assume a net development time of about two years. Stefan Gutsch, with whom I've worked for many years now, did the beautiful graphics and the extensive level design. Alex Ney joined the team to provide the awesome soundtrack. I did the game design and the programming.

It seems huge, but just how big is the game world in *Sam's Journey*?
It really is huge. We have three overworld maps, 27 levels with two or three large segments each, 32 types of baddies plus three bosses. According to our build tools, a total of 2,077 screens have been designed and 4,485 objects have been placed in the scenes.

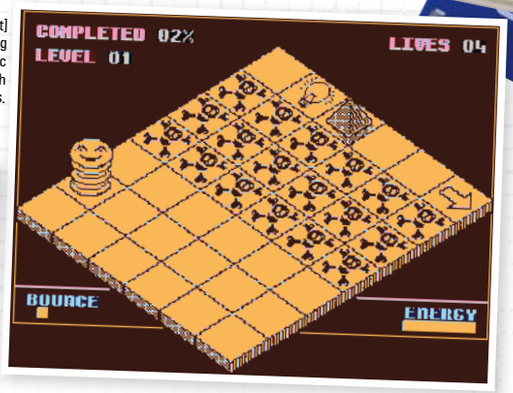
A RAM expansion is needed to play the game on NTSC C64s, why is this?
Ironically, the RAM is not really used, it's there for the REU's fast memory transfer feature. *Sam's Journey* was originally planned as a PAL-only game, and as such, it was modelled to use the CPU cycles available in a PAL frame (20ms). Due to the higher framerate, NTSC frames are shorter (16ms), and we would have had to cut features in order to make everything fit. But we didn't want to do that, so we came up with the idea of using the REU as a hardware helper to compensate for the missing CPU cycles on NTSC systems.

What has the response to *Sam's Journey* been like from C64 gamers so far?
Overwhelmingly positive. People really like the character, his versatile moves, and, of course, the special costumes. They like that they can choose to either explore the maps or do a speedrun. And many love the checkpoints and the save game feature, so they can play the game in multiple sessions and make continuous progress. This works very well with people's limited spare time.

Are there plans for Sam to undertake another journey in the future or do you have something else in mind for your next project?
Both! After the great response to Sam from the Commodore 64 community, we think he could thrill the fans of other classic game systems as well. Additionally, we are evaluating some concepts for another C64 game. It's not decided yet, but we can already tell it's going to be a completely different genre.

» [C64] The insects really get big around these parts, don't they?

» [Atari 8-bit] Bouncing around isometric plains in search of pyramids.



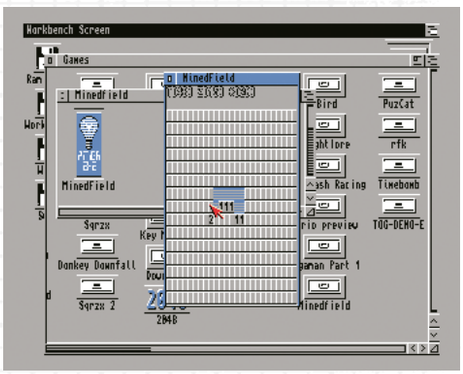
ZIGGY WITH IT

Published for the Acorn Electron and BBC Micro in 1987 by Audiogenic, Dean Lester's Ziggy is an arcade adventure game where the titular character gathers mystical pyramids so he can ascend and rescue his lady friend. Ziggy's world is rendered in two-colour, isometric 3D and filled with hazards to avoid during this quest.

Bouncing forwards 30 years, we come across a conversion of this game for the Atari 8-bits; the graphics have some extra colour now, but the gameplay remains the same. Searching around Kikstart.eu/ziggy-a8 gets would-be explorers a download.

> **"We are evaluating some concepts for another C64 game"**

» [Amiga] Putting the Amiga's Workbench to good use disposing of bombs.



MINE, ALL MINE

Almost everybody with an interest in gaming who has touched a Windows PC is probably aware of *Minesweeper*. The desktop puzzler was bundled with Windows 3.1 onwards. Tiles within a play area must be removed without accidentally triggering a mine and ending the game, the positions of which are hinted at by numbers in adjacent cells.

And now Amiga users can join in with the fun courtesy of *MinedField*, which can be played on the Workbench desktop in the same way that the original is on Windows; try not to trigger any explosives by visiting Kikstart.eu/minedfield-amiga.

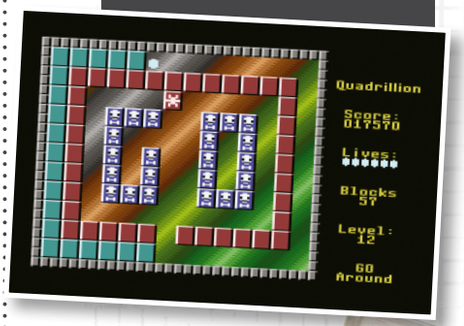
DO YOU REMEMBER?

Released back in 2004 by Csaba Pankaczy, *Quadrillion* is an action puzzle game for the C16 or any other machine in the 264 series with 32K. It was based on Kingsoft's game *Crillion* from 1989 and, while it might look like a *Breakout* variant at a glance, there's no paddle and the player instead controls the ball's horizontal movement as it automatically bounces up and down.

The task is to clear colour-coded bricks – these can only be disposed of if the ball currently matches them and there are special colour-changing tiles to help on that front – while dealing with the ball's control system and hazards within the play area. There are 20 levels but the puzzles become sneaky around level three, so some lateral thinking is required alongside dexterity with the joystick. Find it at Kikstart.eu/quadrillion-264.

» [Plus/4] Literally destroying the programmer's good name one brick at a time.

» [Plus/4] Slowly tunnelling downwards towards the blue blocks and potential death.



GALACTIC TOMB

» **PLATFORM:** AMSTRAD CPC » **DEVELOPER:** ESP SOFT » **DOWNLOAD:** KIKSTART.EU/GALACTIC-TOMB-CPC » **PRICE:** FREE

In the earliest days of the universe there were three incredibly wise and powerful rulers; each managed a kingdom in the Ururben galaxy and together they managed over a happy and enlightened society. Of course, there's always someone like Shakar who sees a utopia and feels it could be a smidgeon more evil, which leads to him defeating these benevolent kings and hiding their bodies throughout the galaxy. But after a few generations on the throne this dictator has grown old beyond the point where medical science can help. Those concealed, regal bodies potentially offer a chance for Shakar to prolong his reign even further, so one of the finest commanders of the imperial army is sent out to gather the required artefacts from the rather hostile worlds they were hidden upon.

Apart from being an unusual scenario for a game – the player is, in essence, supporting an evil dictator, so failing would actually work out better for the people of the empire – this quest isn't going to be easy; the patrolling denizens of each world are deadly to the touch and well armed, with every intention of destroying intruders regardless of who they are. The environment also seems out for our 'hero' with lava and acid pools spitting chunks of their contents skywards, but fortunately the commander is wearing an armoured suit which will take several hits before failing.

The graphics are very solid, with well-defined sprites populating each distinct planet and the player's controls vary from stage to stage as well, with up as jump on the first level but becoming the thrust control for a jetpack on the second for example. *Galactic Tomb* has a few places where things get annoyingly hard, but advancing with caution seems to be the most sensible approach – the game doesn't have a time limit and there's no shame in edging along a corridor whilst holding down the fire button – and it helps to spend a little time acclimatising to the controls on each stage before heading into battle.

>> Score **83%**

» [Amstrad CPC] Doesn't anyone or anything on these alien worlds ever tidy up?

» [Amstrad CPC] Security here are very trigger happy, so it's best to take them out.

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QUAHAPPY

» **PLATFORM:** ZX SPECTRUM » **PRICE:** FREE
» **DEVELOPER:** JAIME GRILO
» **DOWNLOAD:** KIKSTART.EU/QUAHAPPY-SPEC

» [ZX Spectrum] Dauntless Andy was happy to find the purple key.

Heading into the black yonder and accidentally stumbling across a deadly rival would in itself be unlucky, but mankind's expansion towards the stars in the 23rd century is unexpectedly halted by the discovery of forces under the control of a dangerous machine intelligence. The crew of the Scourge are sent out to investigate the mysterious signal emanating from a supposedly barren planet only to come under fire from the machine forces. The player takes control of the only crew member to don their Ranger armour before the ship crash-lands and therefore has to start the mission alone, picking up weapons, power and parts along the way.

Steel Ranger is the latest game from Lasse Öörni, the developer behind the *Metal Warrior* series and more recently *Hessian* and won't disappoint fans of those games. It's a little more arcade-oriented than previous outings but still a very solid run-and-gun experience.

>> Score **85%**

» [ZX Spectrum] She may look like a friend, but surely it's a trap?

MOONCAT'S TRIO

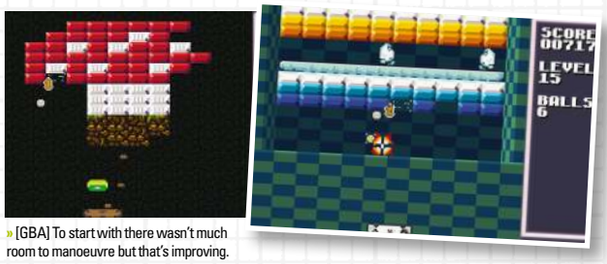
» **PLATFORM:** GAME BOY ADVANCE » **DEVELOPER:** DESIRE
» **DOWNLOAD:** KIKSTART.EU/MOONCATS-GBA » **PRICE:** FREE

Poor Mooncat has managed to fall off the moon and, although he's unharmed, he'll need some help from his friends and a human to get home. All three characters – the player can choose from a cat, frog and chipmunk – are worryingly flat to the point they can be used as paddles in an *Arkanoid* game.

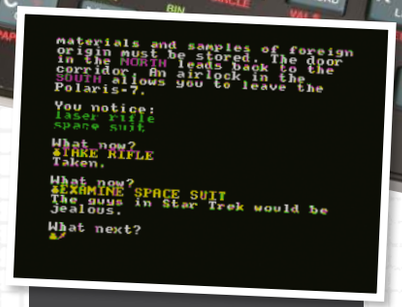
There aren't any real surprises in *Mooncat's Trio* but it's still a very good version of the classic *Breakout*-with-extras formula. Each 'bat' has its own special attribute which has an effect on the gameplay as well, for example the chipmunk has more brick-destroying bullets when picking up a gun.

As well as being particularly well-executed visually, *Mooncat's Trio* is also a solid game to play which offers a couple of neat twists on the classic *Arkanoid* power-ups and enables players to find a bat which will suit their playing style.

>> Score **86%**



» [GBA] To start with there wasn't much room to manoeuvre but that's improving.



ROUNDUP

For the last couple of centuries Olivia Lund has been asleep, cryogenically preserved aboard her ship the *Polaris-7* by a state-of-the-art Hypersleep tube for the long journey to Kepler-62. But having travelled 800 light years she's abruptly woken by the ship because there's a problem.

A gigantic craft of unknown origin has pulled the Polaris-7 in with a tractor beam and essentially wandered off with it; attempts to communicate with the craft prove fruitless and there's a good chance it may be abandoned, so Olivia's only option is to board ti in order to figure out how to release her ship.

Pond's text adventure *Hibernated 1: This Place Is Death* is available for the Spectrum, C64, C128 and Amstrad CPC with the latter two running in 80-column mode. Head to Kikstart.eu/hybernated-1-various for more.

BOMB JACK BEER EDITION

» **PLATFORM:** COMMODORE AMIGA » **DEVELOPER:** GRAEME COWIE » **DOWNLOAD:** KIKSTART.EU/BOMB-JACK-BEER-AMIGA » **PRICE:** FREE

Bomb disposal always looks so tense in the movies, with skilled professionals carefully and methodically working on explosive devices that could potentially kill them. But that isn't how it works in *Bomb Jack Beer Edition*, instead the titular character runs around a brightly coloured world defusing comically large bombs simply by running into them. Bonuses are awarded for collecting devices in the right order – the next being the bomb with a lit fuse – and through items which float around the playfield.

There was an official port of *Bomb Jack* for the Amiga in 1988 but it was a pretty weak affair, so programmer Graeme Cowie took it upon himself to produce a better, more accurate port of Tehkan's coin-op. He's done a very solid job, producing something that feels and indeed looks more like the original compared with Elite's conversion that's very entertaining to play as well.

>> Score **89%**

» [Amiga] Saving the Sphinx from explosive devices is surprisingly hard work.

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TEAM PLAYS

TETRIS

In honour of our cover feature we took to the battlefield of Tetris: The Absolute The Grandmaster 2

NICK 155,010

The faster you can play, the better. Additionally, try to set yourself up for back-to-back line clears, because comboing into a tetris is a great way to get yourself loads of points.

DREW 134,958

I need to keep my home and workspace incredibly tidy, so I start to lose my head when my impeccable tetris design begins to fall apart. One false move and my stoicism crumbles, from then it's almost like I subconsciously sabotage myself.

SAM 119,100

Too often I tried to be too clever and save the power-ups for a sticky situation. I'd inevitably find myself in said sticky situation as a result.

DARRAN 87,458

I can't play this game because it stresses me out too much. I buckle as soon as Drew and Sam start heckling me and I immediately start messing up my lines and squeaking like a child, which would be fine if I wasn't a 45-year-old man.

» [Arcade] We only had 300 levels to rack up the biggest score possible.

BACK FROM THE DEAD (AGAIN)

Do you think *Resident Evil 2* remake has the same hype as the original release, or does it smell like a quick cash in?
@GuyFawkesRetro via Twitter

We don't think any *Resident Evil* game will ever reach quite the same level of frothing expectation as the original sequel did back in 1998 – the series is too familiar now, and there have been too many underwhelming entries. Having said that, the series is still enormously popular and *Resident Evil 7* was a fantastic reinvention. From the recent reveal, it looks like Capcom hasn't skimped on the budget, and given that the remake was announced back in 2015 it's not been quick. If it's everything it appears to be, it could be great.

» [PC] We've got high hopes for this *Resident Evil 2* remake as Capcom seems to be giving it appropriate love.

SMALL WISHES

What is the **RG** team's dream choice for a 'Mini' console?
@RetroBob via Twitter

That's an interesting question. Darran and Sam plumped for handhelds – the editor wants a shrunken Atari Lynx with classic games and a good LCD, while our designer would like a non-miniaturised Game Boy Advance preloaded with classic games. Drew would want a PlayStation mini, and Nick would quite like an iPhone-sized Vectrex with all the hits.

IMPORT DREAMS

Which retro Japan exclusive video games would you like to see re-released in the West?
@SteJay215 via Twitter

We would have said *Metal Wolf Chaos*, but we've been beaten to the punch on that one. Darran wants a straight localisation of *Osu! Tatakae! Ouendan*, rather than *Elite Beat Agents*, and *Psychic Killer Taromaru* because it's a great game that not enough people have played. Nick nominates the strategy/visual novel *Sakura Wars* series – the Saturn and Dreamcast games didn't leave Japan, and the timing is good as Sega happens to be reviving the series soon. There's also a lovely PS2 game called *ChainDive* that counts as one of the system's hidden gems.

SMALL CONSOLE, SMALL EFFORT?

Hi **RG**,
Well by the time the new issue with *Mercs* comes out, I would like to say that it was one of my favourite games for the Mega Drive. From the artwork right down to the intensity and actions of each level that needed to be completed, to defeating the end of level bosses to rescue the president.

But I would like to finish this letter with a mention on the possible release of the Neo-Geo Mini. Yes, a table arcade machine tickles my retro taste buds. But following the issues with The C64 Mini's joystick, the still ongoing controversy with the ZX Spectrum Vega+ and countless third party releases with various mini

STAR LETTER

COMIX ZONE

Hi **Retro Gamer**,
I get your magazine every month and I thought I'd like to send you a few of my comics that I have made in the past few weeks. I'm a big retro gamer of 25 and love me some Sega.
Steven Grayson

They say a picture is worth a thousand words, and you've sent us quite a few. These are great, Steven – thanks for sharing them with us. Readers: if you'd like to see more of these comics, look out for @Stevingesus on Twitter.

» *Commodore World*: the proving ground for gamers who want to test their will to survive.

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consoles, are they just being thrown in to cash in on the craze around the NES and SNES minis without much thought put in to ensure its more or less good quality over quantity?
Cisco Kidd

It's hard to know how the Neo-Geo Mini will turn out right now, as this isn't being manufactured by the same company as the Neo-Geo X. We were surprised by the games lists for both versions – there are going to be some harsh choices as people decide between *Metal Slug X, Magician Lord* and *Shock Troopers* on the international *Twinkle Star Sprites, Top Hunter* and *Real Bout Fatal Fury 2* on the Japanese version. Additionally, some of the omissions are odd – no *Baseball Stars* or *Neo Turf Masters*?

ENDLESS DEATH

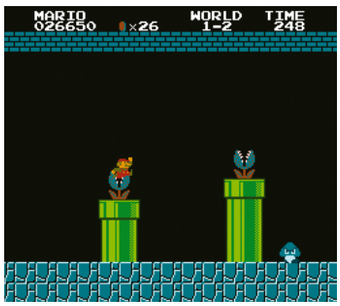
Ever considered a ten to 50 worst ways to die/lose in retro gaming? Chomped in the groin by a fire spitting piranha plant is number 15 on my list.
@RPLizard on Twitter

We've not done that, but our colleagues on *Play* once did something similar on modern games as a digital special. We've occasionally visited the concept of varied deaths in features – we showed the various ways Lara Croft could die in one *Tomb Raider* feature. As it happens, the worst one we can think of comes from *Phantasmagoria,* in which Regina is force-fed animal entrails through a funnel until she chokes to death.

DISCUSSED THIS MONTH

Sticking It To The Man

We've been sticking it to just about everything else too, since we got an excess of sticker sheets with our last issue. The office quest has been to find the most unlikely place for the old Sega Seal Of Quality – so far, the cognitive dissonance of the SNES is winning.



» [NES] Getting your nads bitten off is *only* 15th on @RPLizard's list of bad ways to die.

From the forum

Every month, Retro Gamer asks a question on the forum and prints the best replies. This month we wanted to know…

Is Tetris the best puzzle game ever?

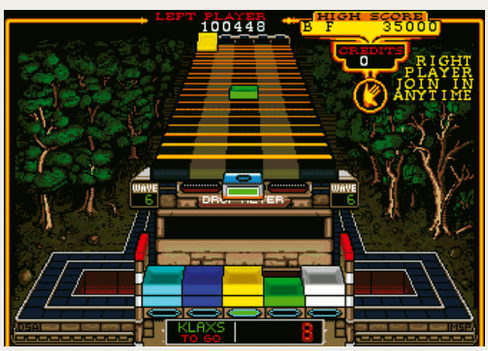
The Laird
As good as *Tetris* is there are other puzzle games that I prefer more such as *Columns, Baku Baku* and *Shanghai.*

kiwimike
I love *Tetris.* It deserves its accolades of course. My late mum god rest her soul was addicted when I bought her an original GB with the cart! IMO it is a better solo game than two player though. I love *Bust A Move* and its variants for that.

Many of the PopCap games are great too, as is *Columns.* But one favourite overlooked at times is *Klax.* That would probably be my personal favourite, and the Lynx had a close to perfect version of it.

Solegor
Tetris is great and can be enjoyed in hundreds of different iterations (bar some of the recent Ubisoft games). Even today we can see developers finding ways to improve on the simple but addictive formula - apparently we will now get *Tetris* in VR! *Tetris* is also the game to bridge generations and is loved by people who otherwise don't play videogames. In that regard it is definitely the best puzzle game ever.

Though for me personally rhythmically-oriented puzzlers have more appeal - *Lumines,* for example.



» [Arcade] Kiwimike feels that *Klax* is an underrated puzzle game.

RetroBob
For me *Tetris* is not just the best block puzzler out there but one of the best games out there. The gameplay is evergreen and anyone can play it.

samhain81
Baku Baku Animal - A great spin on the 'connect 3 or more of the same' puzzler. Lovely animal animations keep the game fresh and entertaining to play.

retro GAMER

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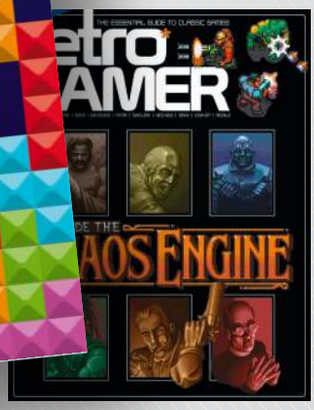

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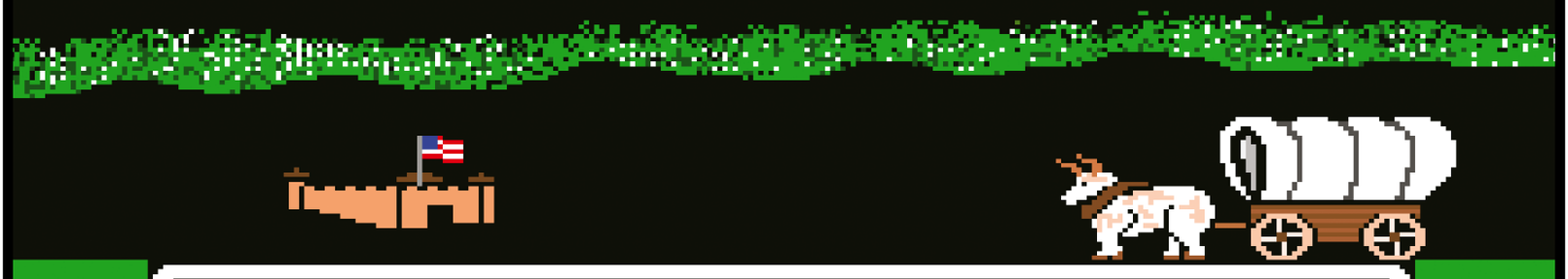

Darran has a broken arm. Drew has typhoid.
Nick has measles. Sam has a snakebite.
Would you like to look around?

Also inside...

Daytona USA, Brian Colin, Thunder Jaws, Cool Spot, Quake II, Atari 2600, R-Type II, Dreamcast Controller and much more!

ENDGAME

EVOLUTION SOCCER

» "Sometimes life last only 90 minutes. Fight for glory!" So goes the wisdom of Mexican developer Evoga, which bravely made its debut in 2001 by codeveloping a 2D arcade football game with the former SNK staff at Brezzasoft. But hey, technological relevance be damned – if the advice is good, we'll take it. So let's skip to the end and see if it helped England bring home some gold...

01

» Those white shirts, could it be...? It could – England has only gone and won the World Cup! The players are overjoyed, and as a result they don't even notice the unnerving shadowy presence celebrating with them in the foreground.

02

» Some bloke in a grey polo shirt is also overjoyed, and happens to be holding the coveted trophy. If he's doing the presentation, surely this level of happiness is outside of his professional remit as a FIFA official? He's suspiciously partisan.

03

» Harry Kane takes hold of the trophy, finally grasping the representation of success that England fans had awaited for over 50 years. But as he clutches it in his hands, he notices something isn't quite right. Something here is amiss...

04

» Congratulation. Singular. That's because this isn't the World Cup at all, but some dodgy lookalike trophy. What's going on? "The government wanted an event to bring the nation together," Gareth Southgate explains sheepishly, "so we set up a fake tournament for you to win. We're not even in Russia, lads."

05

» The Astana Arena is now as empty as this sham victory. Harry Kane looks at the worthless trinket in his hands and contemplates what to do with it. After some consideration, he decides to keep it – he'll be shot if he blabs, and it's as close as he'll ever get to the real thing anyway.

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